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ABSTRACT

The 1,000-Mile Campus at the California State University and Colleges is a concept that suggests that External Degree Programs be made available for qualified students of all ages who, depending on their individual circumstances, find it difficult or impossible to be a part of the regular campus scene. It suggests bringing the professional acumen and resources of higher education to students wherever they may be. This publication contains a collection of prevailing thoughts about degree opportunities and innovation related to the idea of the external campus both on the national scene and in the California State University and Colleges. Most articles are based on the addresses of principal conference speakers at the Conference on External Degree Programs held at the California State Polytechnic College, Pomona. Others were written especially for this publication. (Author/HS)

ED 065048

THE 1,000-MILE CAMPUS

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
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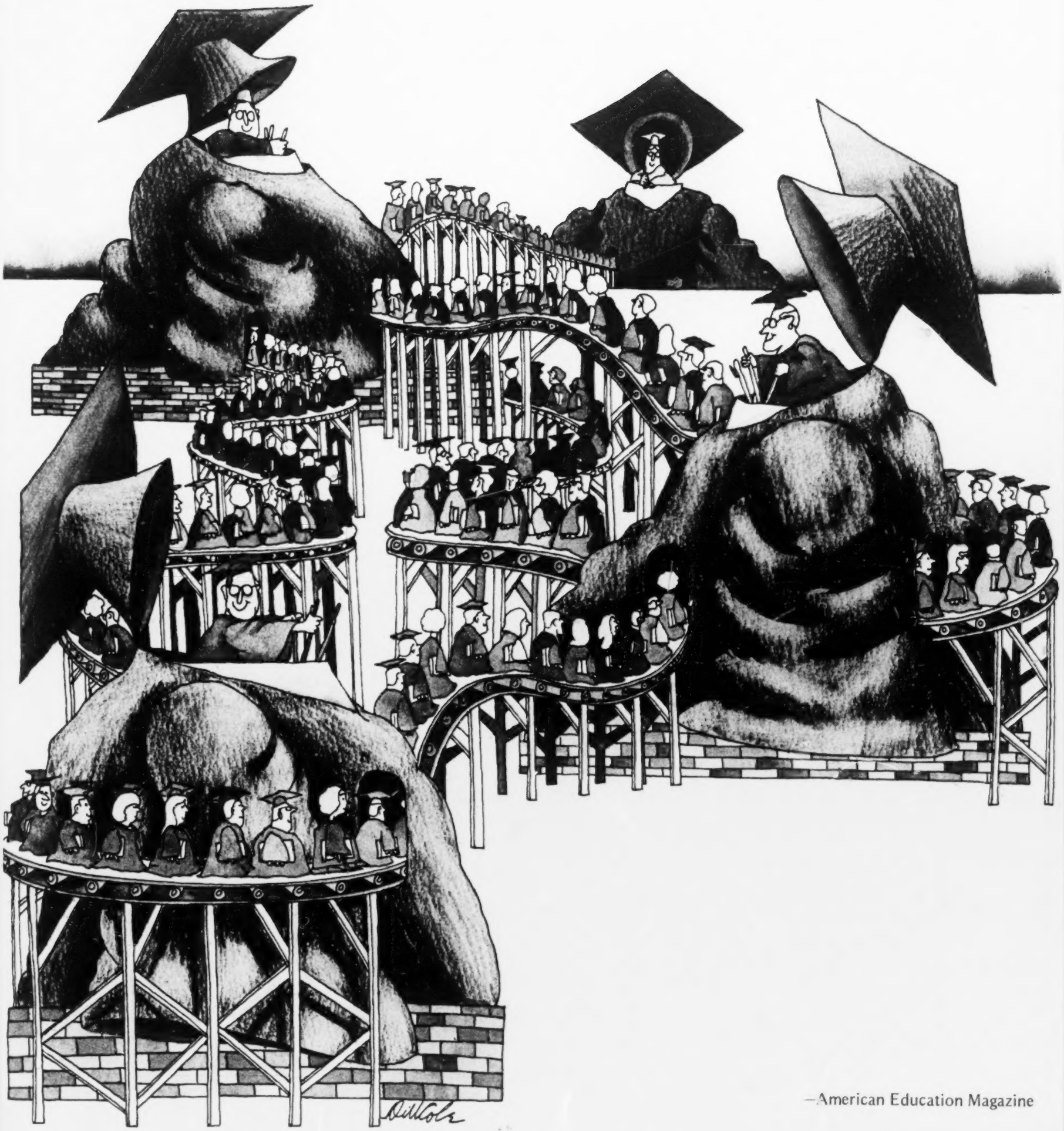
"The 1,000-Mile Campus" is a concept. In The California State University and Colleges it is an outward-reaching

concept that suggests External Degree Programs be made available for qualified students of all ages who, depending on their individual circumstances, find it difficult or impossible to be a part of the regular campus scene. It suggests bringing the professional acumen and resources of higher education to students *wherever they may be.*

External Degree Programs are past the beginning conceptual stages in The California State University and Colleges; they are already a reality. They open, in the words of Chancellor Glenn S. Dumke, "a new world to students who thought their opportunities were gone by."

For faculty, administrators and others interested in higher education, this publication contains a collection of prevailing thought on degree opportunities and innovation related to the idea of the External Campus, both nationally and within The California State University and Colleges. Its basis was the Conference on External Degree Programs called by Chancellor Dumke on December 16-18, 1971, at Kellogg West Center for Continuing Education on the campus of California State Polytechnic College, Pomona. Most articles are based on the addresses of principal conference speakers. Others, including "Innovation: Priority of the 70's" by Chancellor Dumke, are written especially for "The 1,000-Mile Campus."



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April 1972

TABLE OF CONTENTS

4 Innovation: Priority of the 70's
☐Glenn S. Dumke

The Perspective Nationwide and Abroad

13 The Nurturing of Diversity
☐Robert H. Finch

18 England and the United States:
An Excursion in Non-Traditional Study
☐John A. Valentine

22 The "Why" of the External Degree
☐Ernest L. Boyer

28 The Press Meets the Issues
With Dr. Boyer

31 UWW – An Alternative Form of Higher Education
☐Samuel Baskin

35 Foundations and the Underwriting of Better Ways
☐Robert E. Kinsinger

37 Taking the University to the Student
☐Melvin W. Wachs

40 External Degrees – The Views of a Skeptic
☐Lewis B. Mayhew

Narrowing the Focus to California

46 A Commission and Its Work
☐Thomas H. McGrath

51 Creative Restructuring: The Faculty Role
☐David H. Provost

56 Delivery Systems for Breaking the Medieval Mode
☐A. Daniel Peck

60 External Degree Programs – A Market Exploration
☐Frank R. Siroky

63 The Community Colleges: Potentials for Partnership
☐Norvel L. Smith

66 Reaching Out Through Continuing Education
☐Richard C. Barbera

Pomona – The Working Conference

79 Conferees' Deliberations: An Overview
☐George E. McCabe

83 Attendees

Special Dimensions

11 Daniel P. Bryant
43 Roma Mortimer
55 Jerry Bronson
65 Rear Adm. Charles F. Horne, USN, Ret.
73 S.I. Hayakawa

INNOVATION:
PRIORITY OF THE 70's

by Glenn S. Dumke

In January 1971 Chancellor Dumke outlined an extensive program of change in The California State University and Colleges. This program centers on innovation, improved use of available resources, and degree-earning opportunities for students outside the physical borders of campuses. In this article Dr. Dumke reports on progress to date and on plans for the immediate future.

Enabling students to earn academic degrees without the necessity of ever setting foot on a campus is a significant dimension of an even larger idea within The California State University and Colleges.

The larger idea amounts to a substantive and far-reaching directed restructuring of much of higher education as we have known it, as our immediate forebears knew it — indeed, in the fundamental fabric that has characterized our colleges and universities for a century or more.

I call this A New Approach to Higher Education.

Inherent is the soundness of knowledge and learning, undiminished from the past but honed to realities of today. One of these realities is the increased ability and a greater readiness of vast numbers of students. Typically they know more before they arrive on our campuses, and many of them are sufficiently adroit and motivated to go about learning on their own within less structured frameworks of guidance. We are coming to appreciate this and to open to students the avenues and resources that will permit them to reach their goals more rapidly. We should also increase their options. Students should be allowed to challenge, by examination (written or oral or both, and lasting for days if necessary), blocks of knowledge in our curricula without dutifully sitting through months of coursework they already know in substance. They also should be allowed to demonstrate skills in laboratories, in library research or in field work associated with employment and other experiences. We should acknowledge the student, increasingly, as a self-motivated learner; we should supply him with the advice, supervision and tools to get on with the job.

Similarly, we should be inventive and resourceful enough to find appropriate new ways to appraise scholastic progress of students, ways that work with no less integrity than our conventional modes and which will base our degrees even more squarely on academic achievement. Finally, lethargy and aimlessness at public expense should not be acceptable, not from students and assuredly not from ourselves.

Early in 1971, when I first set forth these beliefs as a package, I proposed that their implementation could reduce by one-half to a year or more the time spent in undergraduate instruction for many, if not most, students. Today, in reconsidering that statement, I would put additional emphasis on the word "most."

For the student in the mid-70's who wishes to pursue conventional routes to learning, and who applies himself to these routes, the changes we are introducing will seem less evident. Many deal with basic internal alignments and processes — a streamlining of the cumbersome, inflexible, and unnecessary, if you will — and will not be outwardly apparent, although hundreds, perhaps thousands, of man-hours of faculty and administrative time will have been channeled more productively. This student will be able to view himself much as have generations before him — as following a step-by-step process of formal classroom learning, as enrolling in a prescribed program of courses, taking this course in order to be able to take that course, and each time winding up with the appropriate units that count toward his degree.

"...We have, however, realized more slowly than society as a whole that these institutionalized modes and trappings are working less well all the time, that we are being out-paced on many fronts and that our current systems, as I stated more than a year ago, are 'on the edge of failure'..."

This is the pattern of higher education today and in the past. It was developed as much for institutional convenience, however, as it was to serve students. The earlier prototypes in our planning – and I say this both in sympathy and understanding of the background of the problems – have nearly always centered on creating campuses and the formal structures within them. We have, however, realized more slowly than society as a whole that these institutionalized modes and trappings are working less well all the time, that we are being out-paced on many fronts and that our current systems, as I stated more than a year ago, are "on the edge of failure."

Higher education, today and in the foreseeable future, is a clashing place between students and costs. Both are stunningly on the increase. Yet we are accountable, in the fullest sense of the word, for our product – the educated, contributing citizen who understands and supports quality standards which colleges and universities know well how to set and instill. All too many of our flood-tide of students, though eager at the outset, evidence pessimistic wonderment about the meaning of it all. They find the classified section of a Sunday newspaper reveals requests for specialists of high competence that are unreflected on the pages of our catalogs. The issue of relevance ducks in and out of the evolvement of higher education; it is captured sometimes, but for moments that are often fleeting.

There are ways in which we can – and must – deal with a decade of new realities. "The 1,000-Mile Campus" concept of External Degree Programs is an essential part of the total effort in The California State University and Colleges. It represents an approach that I believe is eminently solid to meet the needs of population groups who, for various reasons, either cannot or have not been able to pursue degrees, though they possess entering qualifications equal to students in our regular on-campus curriculums.

These programs are having important beginnings. One is in the Civic Center of Santa Ana where a master's degree curriculum has started under auspices of California State College, Fullerton. Others, to date offering bachelor's degrees in public administration, are based in the Northern California communities of Marysville, Redding and Susanville, between 50 and 85 miles from the home campus of Chico State College. Newly authorized is a master of business administration degree program to be operated in a major Torrance financial center by California State College, Dominguez Hills. Considering that none of these programs were formalized prior to last fall (and Fullerton's started in February), the more than 175 students enrolled take on added import. There are prospects of significantly more such programs – all on a self-support basis – beginning by next fall. They would involve individual institutions and consortia as well. As they develop and increase in number, I believe we will see inventiveness and ingenuity that can set noteworthy patterns for our regular on-campus activities. In each case the External Degree Program opens a new world to students who thought their opportunities were gone by.

Consider now those who attend our regular programs of campus studies. Ten years ago we had almost 106,000 regular students. This year the number exceeds 260,000. In 1972-73, despite signs of a slight slow-down in growth rate, the total will come close to 273,000 and, in 1980, it may swell to nearly 400,000. The bedrock challenge is to maintain valid principles of higher education in an age when we must reckon with such numbers without a corresponding rise, through the traditional indices and formulas, of the finances available to us. It is clear that we must deal with our own problems; it is equally clear that, unless we deal with them in a style that is resolutely fashioned by ourselves, we will have prescribed our own diet for decline and starvation.

In January 1971 I proposed broad concepts of what is needed. These were received hearteningly and enthusiastically by our Board of Trustees, Presidents of our colleges, faculty representatives, legislators and a substantial cross-section of the public. Many things have occurred since then, both on individual campuses where the proposals served as a stimulus for local designs of self-renewal, and within my office in consultation and planning with Presidents and leaders in the Statewide Academic Senate. Many campuses are, in fact, pulsing with stimulating and pragmatic ideas on credit-by-examination, differing ways of assessing student progress, getting better use of classrooms and laboratories, restructuring courses and introducing clustering and interdisciplinary approaches, turning to new technology, reorienting faculty for changing responsibilities, and abandoning insular notions of campuses for a greater outreach into local communities. Any itemizing of individual campus projects at this point runs a severe risk of omission.

My initial steps were to organize two Task Forces and a

Commission. One Task Force, under chairmanship of Vice Chancellor William B. Langsdorf, is focusing on Innovation in the Educational Process. The other Task Force, headed by President Ellis E. McCune of California State College, Hayward, centers its concerns on Improving Efficiency in the Use of Resources. The Commission on External Degree Programs, under chairmanship of President Thomas H. McGrath of Sonoma State College, is set up to explore and stimulate degree-earning opportunities for students not a part of the regular campus scene.

Progress has permeated thickets of rigidities. For the first time there is one sensible policy, applicable at all 19 campuses, on advanced placement of entering freshmen. Opportunities are emerging to ease inter-campus transfers so that students unable to take courses important to their career goals at one college may enroll in them at another, either public or private. We have made it possible, through experimental approaches, to lessen discriminating lines between "regular students" and "extension students." This, in part, has given impetus to External Degree Programs. The Legislature and the Department of Finance also have assisted us. In an action that went largely unnoticed publicly, the Legislature in 1971 significantly reduced our dependence on specifics of line-item budgeting and we have greater authority to transfer funds for educational programs within overall allotments.

We have fortified our efforts with a realization that truly measurable innovations cannot be set in motion without initial start-up funds. We have carried our proposals to foundations and government. Our first major award – a $451,428 grant from the Carnegie Corporation – will be used for projects at California State College, Bakersfield; California State College, Dominguez Hills, and San Francisco State College. These projects, though varying in detail, all stress the need to make it possible for some students to accelerate their progress toward the bachelor's degree by new techniques apart from standard lecture-discussion and laboratory courses. The projects have strong potential for adaptation at other campuses. They have been designed so that, at the end of 18 months, they can continue, as appropriate, through normal State funding.

We are receiving favorable recognition in Sacramento. A legislative resolution encourages us to proceed with pilot programs and that maximum flexibility and assistance be provided in this regard. Governor Reagan is proposing $4.5 million for innovation and improvement, of which about $3.2 million would apply most directly to our carefully conceptualized new approaches. This would permit timely, creative change in public higher education that is without parallel anywhere in the country, yet is needed everywhere.

In categorizing more specifically what is being planned, I emphasize that the following is not necessarily in priority sequence. Much would occur simultaneously. Modifications and delineations, as we proceed, are both probable and expected. The intended outcome, however, is a more efficient educational process in which greater numbers of qualified students may be served effectively and at a sound level of quality. The ultimate result will be to establish optimum levels for the time to be spent by students in classrooms, the extent to which students should be encouraged to move at their own pace in learning subject matter, and to establish appropriate work-experiences important to their degree objectives.

Credit by Examination and New Ways to Measure Student Achievement

Students should have options to sitting through a programmed sequence of courses. Challenge examinations represent one such option. This is hardly a new concept, yet it is seldom stressed in the traditional college or university. Students can be helped in this approach by faculty mentors, astute and understanding, who supply them with study guides and reading lists, who can direct them to appropriate resources if, depending on a student's background and personal storehouse of knowledge, this is a necessary preliminary to taking the exams.

Planning is centered on comprehensive examinations covering the areas considered within general education (the "what-every-student-should-know" type courses almost uniformly required for graduation), and examinations that challenge a student's knowledge of specific courses, primarily those required in his major field. The direction of this experimental work will be the responsibility of a systemwide Committee on Assessment of Achievement. Initial preparations in establishing and organizing this committee are under way.

We learned much that is helpful from experimental credit-by-examination programs last fall at San Francisco State College and at California State College, Bakersfield. These pilot projects were most beneficial in pointing the way toward the improved administration and introduction of such programs. Substantial numbers of the nearly 1,100 entering

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freshman who took tests developed by the College-Level Examination Program (CLEP) acquired units applicable to the bachelor's degree. Credits equal to immediate sophomore standing were attained by 346. This spring a systemwide sample of other students is taking the same examinations for systemwide norming purposes. Further pilot administrations are planned in 1972-73. One task of the Committee on Assessment of Achievement will be to sponsor faculty teams from appropriate subject areas to review the CLEP tests, examine data on student performance, and monitor subsequent records of students as they proceed through their regular college program.

The Committee on Assessment of Achievement will indeed serve a major function in its primary 1972-73 assignment of devising guidelines and criteria for measuring student achievement. Existing examinations such as the Graduate Record Examination (or Undergraduate Record Examination) may be pilot tested. Other alternatives will be explored: Written and oral examinations and practical laboratory evaluation, ways of recognizing relevant experience acquired by students, and ways in which curriculum may be redesigned to give the student an opportunity to demonstrate that he has attained a specified level in his chosen degree program.

Credit-by-examination, because of the eclectic approaches we are taking, is not likely to involve more than one-fourth of our students. And faculty working in this area will be mindful of their intensified responsibilities: Mastery of knowledge will be the guideline, not coaching for credit. Perhaps one major benefit of the increased credit-by-examination approach is the potential to free faculty so that they may give greater attention to special needs of students from educationally disadvantaged backgrounds.

New Methods of Instruction Emphasizing Student Independence

Reducing dependence on traditional classroom-laboratory approaches requires that existing curricula be reconceptualized and new materials developed to convey the educational program. At the outset faculty must have the time – and the relief from certain presently assigned obligations – to perform the basic curricular redesign necessary to shift more emphasis to the student who learns independently and at his own pace.

While such approaches relate, in many instances, to developing new measures of achievement in subject majors, efforts to permit self-pacing can, and are, going forward on a course-by-course basis. Some faculty using outside grants have already demonstrated important improvements in the educational process through self-paced learning systems. An example is an open-lab method of instruction in the biological sciences at San Jose State College. Emphasis may be on using audio-casettes or film loops. Interaction with the computer may be emphasized, perhaps more so in The California State University and Colleges than anywhere in the United States because our 19 campuses already are linked together to form the largest and most advanced distributed computer network in the country. Self-pacing may entail reading lists to support student library work, field research or use of open laboratories. These, too, require development. A common approach, successful in many applications, is through learning modules or units which the student may complete at his own pace. Peer instruction also may become a valuable ingredient in self-paced approaches.

We are proposing that, on a systemwide basis, individual faculty and campus projects be supported. Many well-conceived proposals are already at hand. A principal goal must be to serve increased numbers of students at greater or equal levels of quality and it is further imperative that a plan for exchanging materials and programs among the colleges be devised. Generally, the more complex projects would be intended for implementation in the 1973-74 academic year. All must take economic reality into account and look toward accommodating increasing numbers of students at modest incremental costs, while maintaining quality.

Innovative Equipment

Our society is more technologically sophisticated than some in higher education either comprehend, care to acknowledge, or find presently possible to utilize. We have much catching up to do. More systematized knowledge is stored in computer banks than in the largest college library. A teenager playing a tape recorder on the beach demonstrates a technical ability that has not yet been fully utilized by certain of our largest academic departments.

New and up-to-date equipment is most important to conduct educational processes effectively and efficiently.

Portable video tape recorders can bring to a student a knowledge of human interactions in the humanities and social sciences. Devices which I alluded to earlier – audio cassettes, film loop projectors, and microfiche readers – can be properly used in multimedia learning centers and open laboratories. The considerable success of audio reproduction equipment in foreign language instruction suggests that learning in other disciplines can be similarly improved.

Special Projects and Studies

Many innovative approaches and theories can be best tested in limited pilot programs or through specialized studies directed at viable change. The Carnegie Corporation-funded program at Bakersfield, Dominguez Hills and San Francisco is illustrative. Expanding these efforts will increase the potential impact on individual colleges, and The California State University and Colleges as a system.

A prototype Weekend College, in which regular courses are being conducted on Friday nights, Saturdays and Sundays, was initiated in February at the Imperial Valley Campus of San Diego State College. It permits far-flung students in this vast desert region who otherwise lack the time to make the trip to Calexico. It is a noteworthy and applaudable example of community outreach and service. The potentialities are greater still in a Weekend College plan submitted by California State College, Long Beach, requiring developmental funds. Long Beach is our largest campus and putting it on a seven-day-a-week schedule is an undertaking of great magnitude.

Projects are planned to demonstrate the most cost-effective uses of television as a teaching tool. We anticipate that selected colleges will be asked to develop TV course-packages to serve substantial numbers of students over a several-year period. We will review these projects in terms of their cost and educational effectiveness. They will serve to demonstrate whether our system should place further emphasis on instructional television.

A number of studies and pilot programs will focus upon means by which student selection, counseling and advising techniques can be improved so that attrition, along with "false starts" in inappropriate programs, can be reduced. An in-depth study of programs for minority-poverty students is planned with distinct objectives – to gain improved understanding of characteristics of these students and how to serve them better and, secondly, to determine which approaches included in these special programs may have wider applicability in the instruction of other groups of students.

Improvement in Faculty Instructional Skills and Management

As I have previously stressed, faculty in the changing higher education process must become more familiar with differing methods of measuring student progress. They require preparation in techniques of working with students primarily in tutorial and progress-assessment roles.

The faculty development program we propose assumes – and accurately so, because past experience with creative and special leaves for our faculty members serves as a guide – that an investment in improving teacher effectiveness will lead to benefits in improved instruction and to faculty receptiveness to alternatives to conventional classroom learning situations. The program would include special institutes and opportunities for faculty who are assigned the time to pursue specialized and advanced training.

A central person to improving efficiency and effectiveness is the department chairman. He is the first-line administrator who must work with faculty and students in programming new modes of instruction, curriculum design, measures of achievement and evaluation. At present almost all department chairmen are employed on a September-through-June basis, carrying heavy teaching responsibilities in addition to their administrative duties and receiving no pay differentials over other departmental faculty. It is proposed that in 1972-73, 50 per cent of these chairmanships – those of large departments – be converted to 12-month appointments, enabling the chairmen to better fill their responsibilities for educational innovation.

New Approaches to Student Access Designed to Increase Persistence

There are signs, based on as yet inconclusive studies, that some of our most successful students are not those who go directly from high school into college and adhere to an uninterrupted pattern of college instruction. Servicemen are a case in point. We think there are valid indications that "stop out" students, rather than being regarded as an administrative inconvenience, hold great promise in society. Some, indeed,

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profit more from college by delaying entrance to it or if there are intervals, once they have enrolled, in which they leave for work or travel.

We propose a limited testing of this thesis, at least to the extent of arriving at findings on which policies and procedures appropriate to stop-in and stop-out patterns of attendance can be based. Ways will be studied to increase opportunities for able high school students – in numbers greater than at present – to begin actual collegiate work during high school. And, finally, we want to provide the best "fit" between student and program, and to increase the likelihood of the student completing the major program which he first attempts.

Improvement in Administrative Processes

Economies, efficiencies and improvements are possible with changes in certain administrative support programs. Here I am referring to student record-keeping, enterprises such as bookstores, cafeterias and residence halls, and also to the total area of how we can best use our facilities. The need for these improvements will become all the more pressing as students begin to pursue their course work at different rates; they may pass an examination, be given credit, and sign up for new courses at any time of the year.

Faculty, in their increasing role of working closely with the student in program development and performance assessment, should have ready access to the student's complete academic history. As many means as possible must be found to reduce unproductive time spent by students and faculty in processing forms for record-keeping purposes.

Improving Efficiency at the Graduate Level

Providing each student with immediate advisement upon entrance to a master's degree program is critical to efficiency at the graduate level. If departments are to classify students upon admission to the college, then they must – with no time lost – be able to properly advise them in formulating study plans in advance of registration. Lack of immediate and continued periodic advisement can (and, in many cases, does!) result in accumulating units which really have no relationship to a particular objective.

Department advisors should have time to undertake this most important function. They cannot, in altogether too many cases. The work is handled on an overload basis and the result is that students experience long delays in meeting with advisors and advisors are unable to devote necessary time for intensive consultation with these students.

Library Development (Automation)

Our libraries grow, but they never seem to grow enough or to move to processes that are markedly more efficient and which can effect long-term savings. We hope to pattern a highly innovative and cost beneficial system along lines similar to the Ohio College Library Center and use software and operating systems already available. The first effort would be toward placing into operation centralized book ordering and processing; however, systems designed to accomplish shared cataloging, serial control, bibliographic information retrieval, book buying and accounting are now available and could be added as desirable.

System Administration and Evaluation

This to me is the cornerstone for The California State University and Colleges to build the most sweeping and diverse program of change in a single system of American higher education. Ours is the largest system of four-year colleges and universities in the United States, and it has progressed steadily and dramatically over the past decade through unifying direction and supervision. The result has provided California with core ingredients in its leadership sectors. We have trained and educated by the thousands its architects and community developers, its business and agricultural executives, its public school teachers, social workers, nurses, journalists and engineers.

To carry out innovation and renewal, to encourage, support and share what is learned on one campus with the thousands of students and faculty on the others, individual campus projects must proceed within a systemwide framework. We argue strongly against those who ask for money for vague, obscure reasons which lack the promise of clearly beneficial results with strong potential for transfer to the solution of problems elsewhere. To produce such results our undertakings will be administered, monitored and evaluated as appropriate on a systemwide basis.

"As a businessman and one vitally interested in education, I heartily support the concept that major innovative changes in our educational system are long overdue.

"Therefore, I am heartened by the "Open University" concept to supplement our current formal system wherein studies could be pursued outside present traditional processes through a lifetime and under appropriate guidance – all of which could involve examinations and the awarding of external degrees for those who completed their courses. I am personally grateful to Chancellor Glenn Dumke for proposing and implementing this program by appointing a Commission on External Degree Programs. For a number of years business institutions in this country have been profoundly concerned over the need to stimulate the individual employee into continuing his personal growth and development.

"All of this, of course, ultimately enures to the benefit of business. Many approaches have been tried and many colleges and universities have cooperated and offered a variety of courses. While these efforts have had mixed success, on balance they have been beneficial.

"While Chancellor Dumke does not claim he is offering a panacea, the program will certainly be received with enthusiasm by our business community – for it provides a new educational instrumentality for learning and for achieving that which many cannot get nor would want through typical conventional approaches."

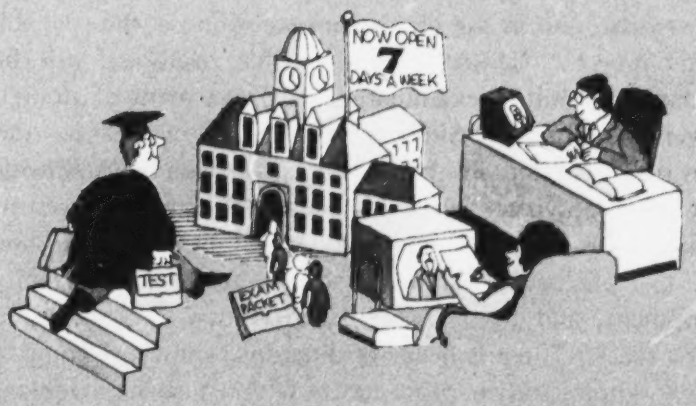
Daniel P. Bryant
Chairman of the Board
The Bekins Company

In terms of total outlay for innovation and improvement, and in the dimensions we propose, the cost will be m o d e s t . Central direction, for example, will be provided for credit-by-examination and assessment of student achievement projects. Similarly, campus programs in new modes of instruction will be developed through a systemwide linkage with provision for evaluating and disseminating results of individual faculty projects. Required will be consultants and staff to pursue programs and institutes for faculty development, and to devise policies on new approaches to student access. There is need for directing campus planning to improve administrative procedures. Without such provisions the impact of the overall program will be markedly lessened and considerably less fruitful within our system.

The goals I have described are entirely achievable. To some they may seem revolutionary. The External Degree concept of "The 1,000-Mile Campus" is a vibrant, creative part of the whole, and it exemplifies – through successful beginnings – the speed with which we are proceeding.

A year ago January when I presented these ideas I began by stating that the time has come for fundamental changes in the character of, and in our approach to, higher education. We are past the time of becoming; we are now deeply into the process. □

THE PERSPECTIVE NATIONWIDE AND ABROAD



THE NURTURING
OF DIVERSITY

by Robert H. Finch

Mr. Finch is Counsellor to President Nixon and is former Secretary of Health, Education and Welfare. As California's lieutenant governor from 1967 to January 1969 he served as an ex officio member of the Board of Trustees of The California State Colleges, since renamed as The California State University and Colleges.

Where does the university stand today? To a few, the recent past presages the beginning of the end of the university. On the one hand, we are told that the American university, the erstwhile "archive of the Western mind," has irrevocably become nothing more than an armed camp. And an armed camp where truth is a fugitive and irrationality brandishes the swiftest sword, we are reminded, holds no promise for the future. On the other hand, some say that recent events prove higher education to be a fraud perpetuated on the young. Repression, it is asserted, is given where relevancy was requested and is required. The only recourse in such a situation, then, they would argue, is to destroy the present system in its entirety.

To yet others, the recent history of crisis in higher education merely extends their original distance from any positive identification with the university. In this group are both those – before and past the "college age" – who have never envisioned themselves in the role of students. While some over 30 may have supported it in the past financially and morally, the increasing realization that they will never benefit personally from a given institution has further dimmed their perception of the worth of higher education.

While such views are not valid or all-inclusive, they are instructive – for they indicate a depth of feeling which has heretofore been absent. They also indicate the potential volatility which lies amid the confusion about the continuing role of the university in our society.

One of my continuing interests and concerns as Counsellor to the President is the area of higher education in America. In the convulsive months after the tragedies at Kent State and Jackson State, I consulted with special panels of experts – one of them headed by Chancellor Glenn S. Dumke – and I have tried to keep in very close touch with all the developments since then. Today I would like to reflect on some of the emerging trends, particularly in terms of the kinds of approaches that it seems to me are needed if we are going to continue to fulfill the promise and the mission of higher education in America.

I can see three massive events that have brought us to our present condition. The first was the enormous World War II baby boom. The second was the budding of our technological and scientific revolution, and the third was an unstable and totally unanticipated admixture of social forces. All three of these massive events came together at about the same time with great impact, and I think each of them deserves further thought.

WAR BABY BOOM 123456789B00000M

It was Peter Drucker, one of our most distinguished educators and management consultants, who pointed out the war baby boom as probably one of the most important social data of our time. And it was he who argued that it was one of the most overlooked and underestimated.

Between 1948 and 1953, the number of births in the United States increased by almost 50 per cent – the largest increase in births ever recorded anywhere in the history of the world. This tidal wave of war babies suddenly came of age and hit with a force that could hardly be predicted, but which, perhaps, should have been more anticipated.

In 1960 the center of population gravity in the United States lay in the group between 35 and 40 years of age – older than it had ever been before in our history. Then, what Drucker graphically called the "eruption of teenagers" hit, and suddenly in 1964, thanks to a baby bust which had followed the baby boom, the 17-year-olds became the largest single age group in America. Since then, until this year, the 17-year-old group has grown still larger each year and has become the center of our population gravity.

It is largely true that in our modern industrial urban economy the real generation gap probably comes in those tortuous four years between 17 and 21. Those are the real years of searching and confusion, of trying on and – in some cases – of choosing not to make the race at all, and dropping out. As Professor Drucker has pointed out:

> *The youth revolution was therefore predictable 10 or 12 years ago. It was in fact predicted by whoever took the trouble to look at the population figures. No one could have predicted then what form it would take, but even without Vietnam or racial confrontation, something pretty big was surely bound to result from such a violent shift in age structure and population dynamics.*

The second force, at the very time when many young people were entering college, was the Sputnik-prodded technological revolution. As late as the early 1960's I suspect that the American perception of college life probably still owed more to F. Scott Fitzgerald than to Nicholas Murray Butler. But in the late 50's and early 60's there came, it seems to me, an imperceptible point where mastery of college level subjects became just plain harder. There was so much more to learn, so much more of it – and it had become far more basically complicated and demanding. While there remained some so-called "snap courses," they became more difficult to find and certainly more difficult to major in.

It was at this time that the baby boom broke, and the competition for openings in colleges and universities became more fierce; getting there was no longer half the fun, and just staying in suddenly became a full-time occupation and pre-occupation. All this caused a residue of disillusionment and perhaps to some a faint smell of hypocrisy on many campuses. For many young people who had the time and brains to spend four years in college – but really were not prepared for these changes – it was a very tough awakening, and so it was for teachers and administrators and certainly for members of governing boards.

Finally, the third factor came into play – the combination of social, cultural, and historical events which would alter the world in which the students had lived and the way they perceived it. In 1960 we had the race between the two youngest candidates for the Presidency in the history of our nation. This stirred many young people to an awareness of the importance of political action and the potentialities of our society. Then, less than three years later, they had the enormous trauma of that terrible assassination. This shocked them into a realization of that sometimes difficult-to-control beast which remains never too far below the surface of idealism in ours or any other society which calls itself civilized.

Soon this same generation and the cluster about them were reeling again because of assassinations of two more dominant public figures. But even these individual acts of violence at home became overshadowed by the totality of violence abroad: The war in Vietnam, the longest war in our history, an undeclared war. It was constantly visible on television creating a special impact our society has not before experienced. And, for many, these conflicts – particularly Vietnam – posed far more than a simple moral quandary. As local draft boards began drafting those who left or flunked out of school, student status became more and more important. Is it any wonder that the purpose of educational institutions sometimes became distorted in the eyes of students themselves?

I would not attempt to try to evaluate in the early and mid-60's what has been called the "Woodstock Syndrome" and the attendant counter-culture hitting this same set of events. The demands, the pressures, the alternatives have been diagnosed by Alvin Toffler as acute "Future Shock." Mr. Toffler carries it on into the current interest in astrology, yoga, zen, witchcraft, and Eastern mysticism, with pop groups setting the peer group life-style and, some would argue, the general anti-scientific over-reaction to the pace and pressures of this modern technological life.

But now I think there is good reason to be optimistic. The time I have just described is behind us. We must not let a residue of disillusionment of any segment of this society keep us from grasping an enormously exciting opportunity. Just as those of us in government are trying to discover the lessons we could and should learn from recent domestic and foreign affairs, all of us are endeavoring to reassess what profit might be derived from our recent difficulties – to learn from our mistakes. Conditions have given us an open invitation to take higher ground and to reappraise our entire educational posture. We are again challenged to get back to what education is all about and the true focus of our efforts – the disciplined growth of the individual student.

I am very proud that California's system of public higher education ranks as probably the most advanced and innovative of any State in the country. I am very happy to have a part in this. And I know that under Chancellor Dumke's responsive and responsible leadership, that we have only just begun to test and explore the possibilities of higher education for Californians.

It is clear that today we have a problem much greater than simple access to higher education. We are forced to restructure and to refashion a value system of higher education that will intrigue and commit individuals to giving their best efforts. What we are trying to build is a society of real excellence. John Gardner put it very well. He said:

> *Some people have greatness thrust upon them. Very few have excellence thrust upon them. They achieve it. They do not achieve it by doing what comes naturally; they don't stumble onto it in the course of amusing themselves. All excellence involves discipline and tenacity of purpose.*

In a recent book of reflections called "Surviving the Future," Arnold Toynbee has written about the essentially active and pragmatic nature of mature higher education. He argues that to do it yourself is the essence of real education. The theme of all education should be to teach people to educate themselves, whether they want to engage in some intellectual activity or in some practical vocational-technological kind of activity.

Many of us would agree that there can never be any limit of time or age or space to true education; it should be a process and not a bench marked time-frame. And, if there was ever any doubt, the trials and tribulations of American education in the past few years should at least prove that there is no such thing as a "finished product" in education. An academic degree, I think we can stipulate, does not invest any individual with the ability to accomplish a given task. Hopefully, however, it means that one who has profited by the time and experience which those letters after the name signify, knows how to go about doing a job and knows the way to approach it. And he knows probably the most basic and important thing that anyone can bring away from an education: The extent of the limitations and the parameters of one's knowledge.

I happen to believe that a solid educational process must have a humbling component if it is going to be meaningful. It must provide a person with the ability of true self-perception, to give one a vision of his own limitations as well as his capabilities. But to say, however, that educational institutions must more strongly focus on the individuality of the student is not to say this is their only point of reference or concern. A slavish allegiance to student whim would benefit no one – neither the student, the teacher, nor the administrator.

One of the striking aspects of the kinds of programs now being considered by what, since early March, has been renamed The California State University and Colleges, is that they imply the best ways in which the real ties between society and the university or, if you will, town and gown, can be reestablished. This, too, is what I think Chancellor Dumke was getting at in a very solid report he sent to the White House entitled "Selected Problems Facing Higher Education in the 70's." In this report he says, "The college or university, whether public or private, is an institution created and supported by the society which surrounds it. It owes its allegiance and being to that society."

In addressing itself to this dual responsibility, the institution is always torn between the town-gown polarity. Chancellor Dumke's report suggests that the greatest contribution to be made by any system is the adequate preparation of students to become fully functioning members of society with as many options as possible; and that formal education should equip the student with the means by which he can make intelligent decisions in every phase of his life, and not simply have to take pre-digested answers and have decisions made for him. Accepting that commitment and the difficulty of that broad mandate, the other big problem is to continually remind people that it's up to each system and each school, private or public. We do not want each institution to respond to society in the same manner.

Our experience has shown there is no single best road to higher education. We want desperately to nurture diversity and the basic concept of beneficial pluralism. This is the cornerstone of all our governmental structures and of the private sector as well. The last thing anyone wants is a suppliant generation lock-stepping its way through identical doses of State-designed educational programs. We should all agree that we want diversity – diversity of institutional size and structure and location; diversity of curriculum; diversity of tradition and heritage; diversity of students and faculties.

We should also have a set of options so that anyone at any point in his maturing life can come back into what we call higher education.

The excitement of External Degree Programs, such as those being discussed in California, arises out of great numbers of potential students who cannot physically get to the campus. While we are committed to preserving and protecting all of the existing kinds of higher educational institutions, I think that we could consider some additional premises that I will put forward for consideration.

Knowing that academic credentials are no sure indicator of later success, we have to take care that we do not credentialize our society. It would be the ultimate irony if, while we are striving to eliminate racial segregation, at the same time we are creating a society segregated by credentials in which those without B.A.'s or other degrees sit at the back of the bus!

Let us be cognizant of the dangers of academic isolation in which people proceed from pre-school through college without ever being exposed to other real world experiences. Higher education has to be seen as a continuing process through all of life with an obligation to the mature public as well as the teenaged freshman. What we must avoid is the straitjacket fitting of all individuals into stereotypes of age and duration – into the tight boxes of ages 6 to 25, to the four-year course or the two-year course, or whatever. We must have easier ways to get in and out of the system. People will increasingly have two and three and more careers in their life-time, and we should recognize this desire and perception on the part of many of our young people.

We also have to do a great deal of new thinking about the physical trappings of higher education. We must look beyond the traditional college campus for new routes to academic credentials and all of the devices that Chancellor Dumke has suggested, so we can reach individuals studying in homes or with friends, in community centers, "Storefront Colleges," or under any circumstances that can bring students and teachers together.

But, above all, none of this suggests doing away with what has been proven and tested. Those who argue that we have to throw out all that has come before are missing the lessons of history. Effective change is built on that which precedes it and is a logical extension of its forerunner. If an institution is not on-going and developing in a continual state of becoming, then it may be going downhill.

So I am very pleased that The California State University and Colleges has placed itself in the front ranks of those who are actually doing something about these kinds of changes. I come again to the fact that it is education which provides not only the brain but the backbone of our nation. It was critically needed yesterday. It's desperately needed today, and tomorrow may be too late unless we do well in meeting the changing priorities that are required.

As Charles Varle wrote a century ago:

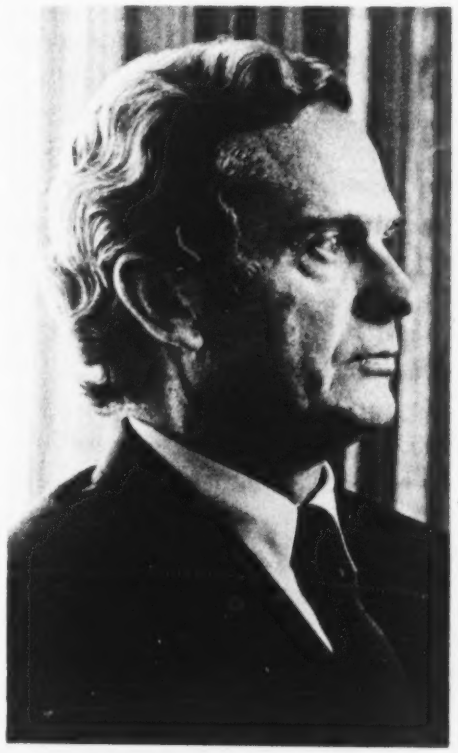
> *Education is a companion which no misfortune can depress – no crime destroy – no enemy alienate – no despotism enslave. At home, a friend; abroad, an introduction; in solitude a solace; and in society, an ornament. Without it, what is man? – a splendid slave, a reasoning savage.*

The prospects of creating a truly humane society are dependent on the vitality of our higher educational institutions. We should get to the business of fashioning variations in this system – variations which will challenge and excite and provoke excellence from everyone it involves and touches. □

" . . . Conditions have given us an open invitation to take higher ground and to reappraise our entire educational posture. We are again challenged to get back to what education is all about and the true focus of our efforts – the disciplined growth of the individual student . . . "

ENGLAND AND THE UNITED STATES: AN EXCURSION IN NON-TRADITIONAL STUDY

by John A. Valentine



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A little over a year ago in a speech delivered at the annual meeting of the College Entrance Examination Board in New York City, Alan Pifer, President of the Carnegie Corporation, called attention to the need and prospects for degrees in this country that could be earned outside of normal institutional frameworks. In the months since, plans for new External Degree Programs have been announced at a lively rate. Developmental activity has proceeded feverishly, and a few new programs are already meeting the hard test of actual experience. It is too early to predict with certainty where these programs will lead, how far they will go, and what impact they will have eventually on individual lives and on institutional destinies.

Let us start with some history and facts, and for this we take a vicarious, brief, and necessarily selective field trip. It begins with a flight to England to visit the University of London, where degrees for external students have a very long history, and also to the new Open University, starting its second operational year January 1, 1972, and much in the news.

ENGLAND

The University of London

For years after its founding in the 19th Century, the University of London did no teaching at all and performed only an examining function. When it became a federation of teaching colleges around the turn of the century, it continued to permit some students not enrolled in constituent colleges or schools (and therefore called "external students") to earn degrees by performing successfully on examinations. Students in some 60 countries in addition to Great Britain are eligible to enroll. They must meet the same stiff standards for admission set for internal students, remain on the rolls for at least three years, and take examinations the same or similar to those taken by internal students. Most of them do not study independently, but instead take courses full time or part time in non-degree-granting institutions. Relatively few of those who do study independently, the so-called "private" external students, achieve the degree, particularly those from overseas. The option of enrolling as external students must seem priceless to those who succeed, and bitter fruit to the private students who stick with it for three or more years and then fail.

The Council for National Academic Awards

One way England has found to relieve the pressure of students seeking alternative degree routes is by means of the Council for National Academic Awards (CNAA). This Council is a unique accrediting and degree-granting agency. It helps develop programs in colleges that do not themselves have authority to grant degrees

USA

and then inspects them once they are in operation. If a program meets its standards, the CNAA accredits it, and then awards degrees under its own name to students who successfully complete the program. Since its formation in 1964, the CNAA has accredited over 300 courses, many of them involving combinations of work and study. Over 23,000 students are currently enrolled in these courses.

The Open University

The pressure is being relieved most dramatically by the Open University. First spoken of publicly by Harold Wilson in a campaign speech before the 1964 General Election (in which he referred to it as a "University of the Air"), the university was planned and developed with his support and the tenacious determination of Jennie Lee, Aneurin Bevan's widow, while the Labor Party was in power. A primary goal was to give members of the working class a crack at quality higher education and a university degree, making use of the resources of a technological society to educate men and women for life and work in such a society. The scheme was opposed from the start by influential academics, who cited the threat it posed to the standards of a British university degree.

The University opened its figurative doors January 1, 1971, to 25,000 students, selected as a matter of necessity but not principle from the 43,000 who applied. Anyone 21 years old or older who lives in Great Britain is eligible to enroll. Students of university age were deliberatively excluded, to keep the focus on older adults who needed a second chance, and to avoid the possible image of a dumping ground for rejected applicants to the residential universities. Since there are only about 50,000 spaces each year for first-year degree-seeking students at all of the residential universities, the 25,000 additional spaces provided by the Open University represent a striking 50 per cent increase in what we would call freshman enrollments. This large initial intake was planned deliberately to achieve economies of scale. Developmental cost per student is estimated to be about one-third the cost per student of building an ordinary British university; operating cost per student is expected to be about one-fourth.

What is it like to be a student? You live at home and if employed or occupied full time, perhaps as a teacher or housewife, you remain on the job. You may never see your university, or rather its headquarters, in Bletchley, north of London and approximately half-way between Cambridge and Oxford. You will be in close touch, however, and 10 hours or more of your life each week will be given over to your studies.

Every few weeks you will receive through the mail material and assignments for the one or two courses you have elected to take. If enrolled in the science course, you will receive a remarkably complete laboratory kit, and some assignments will include experiments. During the week you will turn on your telly or your radio to BBC programs functionally related to the correspondence materials. Over the weekend or an evening or two during the week you may drive to the study center nearest you where you can catch up on broadcasts you missed, talk with fellow students, sit in on a tutoring session, or discuss your plans and problems with a counselor. You will mail in completed assignments on a regular schedule, and receive in return grades and comments. Some weeks will be vacation weeks, and one or two weeks during the summer you will participate in a session on a residence basis at a school or college rented for the occasion by the University. Toward the end of the year you will take a final examination in each course.

When you have completed six courses, in three, four, or more years, you will be awarded a degree.

The University is still much too new to know how well it will succeed, and how many people of what ages, occupations and backgrounds it will eventually serve. Teachers have so far enrolled in greatest numbers; relatively few workers have applied, although more for this year's courses than last year's. The relevance of the Open University experience for the United States is also difficult to judge because circumstances over here are so different. For one thing, the percentage of people in Great Britain without degrees is much larger than the percentage in the United States. Still, the vision, boldness, quality and speed of the undertaking have understandably stimulated American interest in External Degree Programs. The use of teams of professors and media experts to prepare the printed and broadcast materials; the combining of correspondence, TV, radio and tutorial instruction; the challenge to professors whose teaching is exposed to other professors – these are all noteworthy points.

In our visit to England; we have seen three ways of awarding degrees outside of the residential college framework. The University of London examines students to determine what they know, and if what they know is up to standard, regardless of how the knowledge was obtained; it uses its degree-granting authority to confer degrees upon them. The Open University takes the tools of instruction, including the teacher as well as materials in multi-media form, and delivers them to the homes and neighborhoods of students. If performance is up to standard on assignments and final examinations in a sufficient number of courses, OU exercises its authority to grant students degrees. The Council on National Academic Awards examines programs of instruction offered by institutions lacking degree-granting authority and if the programs meet its standards, it uses its authority to award degrees to individuals who complete them successfully. In effect it delegates responsibility both for teaching and examining students to the institutions, but not the authority to confer degrees.

As we return to the United States, we are ready to look for evidence of these three kinds of approaches, and of possible variations.

THE UNITED STATES

Degrees by Examination on Validation of Student Proficiency

Our first visit after landing at Kennedy Airport is to the New York State Education Department, where work is under way on a Regents External Degree Program, first announced by Commissioner of Education, Ewald Nyquist, in September 1970, and supported in its development by grants from the Carnegie Corporation and Ford Foundation. The purpose of the program is to award undergraduate degrees to persons who possess knowledge and abilities equivalent to those of a traditional college degree recipient. Initially it is planned to offer an Associate of Arts degree by late 1972, and a Bachelor of Business degree by late 1973. A degree program for nurses is also in the works.

For this program the State Education Department draws upon several key resources. There is the unique circumstance of the Department also being the University of the State of New York, the Regents of which in addition to bearing responsibility for coordination of all education in the State, are empowered to award diplomas and degrees, although the University itself is not a teaching institution. The Department, for some years, has conducted a high school equivalency program which has enabled thousands of people who did not attend or graduate from high school to earn diploma equivalency certificates on the basis of examinations. In more recent years, the Department has developed the College Proficiency Examination Program, the purpose of which is to make possible the award of college credit to students.

The External Degree Program will make use of available standardized examinations, including the College Proficiency Examinations and also the College-Level Examination Program of the College Entrance Examination Board. Other assessment techniques will also be used, however, such as faculty panels. Formal course work completed at accredited colleges will be considered for credit toward the degree. There will be a dual emphasis on flexibility and quality.

The program will provide opportunities similar to those afforded external students by the University of London, but there are differences. The choice of degrees will be more limited, at least in the early years of program development. Admission to the program will be less rigidly governed by formal requirements. The assessment of what students know will not be as limited to examinations, and the examinations they take will be designed to measure learning generated in a variety of ways, rather than by the curriculum of one particular university.

The main point of similarity is the principle that if achievement and competence can be demonstrated, they should be recognized. This principle is not a new one in American education. It has found expression for years in practices of moving able students ahead to more advanced grades and courses. It has been the basis for the Advanced Placement Program of the College Entrance Examination Board, which enables students entering college to skip over courses they mastered in high school. It is the basis for the more recently developed College-Level Examination Program. Awarding credit by examination is generally accepted to be a sound and just practice. How much credit becomes a debated question as it builds toward two, three, or four years of college. When it reaches the point of a degree by examination, fundamental questions are raised about the nature of both the degrees and the examinations. It is probably a good thing to get these questions out in the open, and to bring the best possible thought and judgment to bear on them.

USA

Degrees Based on Catered Instruction

Our next port of call is the coordinating center of Empire State College in Saratoga Springs, New York. This college is the newest addition among the 71 institutions that are part of the State University of New York, or SUNY, which you must realize is not the same as the University of the State of New York. The concept of the College, as one whose students will earn degrees without attending traditional, structured classroom sessions at a specific campus, was announced by Chancellor Ernest Boyer in February, 1971. Its development has been supported by grants from Carnegie and Ford. It is now in operation with approximately 120 students enrolled in Associate of Arts and Bachelor of Arts programs; it is expected eventually to serve from 10,000 to 20,000 students – the goal for 1973 is 3,500 students.

As a student at Empire State, you pay the standard $550 annual undergraduate tuition. You may enter the program at any time. You will work closely with a faculty mentor attached to an Area Learning Center nearest your home. Eight such centers are planned, each one linked to SUNY institutions.

With your mentor you will work out a program of study that takes into account on the one hand your interests and goals and on the other hand commonly expressed goals of a liberal education. Depending on your individual circumstances, your program may include independent reading, occasional course work at a SUNY college or university, on-the-job experiences, supervised volunteer activities, apprenticeships, and other special learning arrangements, including travel. It may also include courses organized by the Empire State College faculty.

Your program will be reviewed and approved by other faculty members. Whenever you complete your total program, to the satisfaction of those in a position to assess your accomplishment, you will be awarded a degree.

A planning faculty, which will include visiting Faculty Fellows from State University and other institutions, will develop instructional materials and maintain academic and business records. There will also be a Faculty Advisory Committee to assist in the College's further development.

I refer to this degree program as a case of "catered instruction" primarily because it, like the Open University, delivers instruction where the student happens to live. Instead of going to a restaurant at certain meal hours and selecting from the menu there, the individual calls a caterer and arranges for delivery of the dishes he wants, where and when he wants them. The focus shifts from the individual adjusting to the institution to the institution adjusting to the individual.

Empire State College goes a significant step beyond Open University, however. It develops for each student a program built around his particular interests, needs and abilities, and it allows the program to include a variety of work, community service, and other types of experience. It differs also in drawing extensively on resources other than those provided by the college itself. It does not emphasize as much the development of rather elaborate course materials on a mass basis, and it does not plan to make extensive use of television and radio instruction.

For another example of a new, non-residential college, similar to Empire State College in its emphasis on individualized instruction and assessment, we travel to the twin cities of Minneapolis-St. Paul, where the Minnesota Metropolitan State College will soon be admitting its first students. Instead of reaching out to students in all parts of a state, it will serve people in a large urban center. It considers the city itself as its campus; it will use as faculty anybody who knows something well and is willing to teach it; it will award degrees on the basis of demonstrated competence.

It certainly needs to be recognized that many established institutions with campuses and dormitories have been making instruction and degrees available for years to students who are not able to or do not care to enroll in the regular undergraduate programs. In many instances, such institutions hold to their customary degree requirements and basic methods of instruction, but make certain administrative arrangements, for evening classes perhaps, or classroom instruction in outlying areas. Peripheral, second-class status is a usual characteristic. In a few instances, substantial modifications are made in the degree requirements, in the content and method of teaching and also in administrative arrangements, to meet the needs of what is recognized to be a different clientele. Degree programs for adults at Goddard College, the University of Oklahoma, Roosevelt University, Syracuse University and the University of South Florida are conspicuous examples. The programs now under way in the 20 or so colleges and universities that are participating in the University Without Walls project of the Union for Experimenting Colleges and Universities provide further examples.

Continued on Page 70

The "Why" OF THE EXTERNAL DEGREE

"The point is simply this: Today's student is bombarded on all sides with new ideas in a multitude of ways. He does not need to travel each day to a distant campus, to the high and holy hill where the oracles are heard."

by Ernest L. Boyer

Several weeks ago I participated in a ceremony which, to an outsider, would not have seemed particularly impressive. The setting was a cluster of renovated offices in an old building in downtown Albany. About 50 people were present -- six or seven professors, 20 or 30 students, and several newsmen. A few appropriate remarks were made, refresments were served, and that was all.

Why did I find this occasion so remarkable? Because with this simple, unpretentious ceremony a new institution had been dedicated. It was the first Learning Center of State University of New York's Empire State College. The handful of students who attended were merely the first of 400 who will enroll before the end of this year, and the first of a projected 10,000 students by 1975.

The ceremony was a dramatic one precisely because of its simplicity. Indeed, it was the first college dedication I have ever attended where the *people*, not the *structures*, dominated the occasion.

What is this new approach which has generated over 12,000 inquiries since it was announced not many months ago? Essentially, Empire State College is a new autonomous institution within the framework of the State University of New York. It is a nonresidential college and will offer a degree in the name of the State University of New York. The student's "campus," in this case, will be a learning center near his home, and we are planning several such learning centers scattered across the State.

A learning center is a simple, convenient facility, rented or renovated, with faculty offices and seminar rooms where the student will meet more or less regularly with a faculty adviser (called a "mentor" in this case), who will also be available by telephone or by mail. The student and his mentor together will work out a program of study – a kind of learning contract – leading to a degree. The time period involved will vary from possibly three years to four or more.

The Empire State College – and I think this is an important point – although fully autonomous as an institution, is built upon a network of 70 existing campuses. A student may, for a semester or two, enroll in a conventional college, take a course if he wishes, and have access to the library closest to his home. An educational "credit card" will give him access to many facilities throughout the entire State University system.

Obviously, a student's program will involve a good deal of independent study under mentor guidance. Books, cassettes, television and correspondence will be part of his special scene. In some cases, he will have supervised work in a nonacademic setting, such as an internship in a museum or in some social service or government agency. The point is that the program will be shaped by *his* individual needs rather

than by the imperatives of a specific institution. In short, the college does not confuse *learning* with *location*, nor does it equate university study with a nine-month, five-days-a-week, four-year ritual.

This, in the sketchiest possible form, is Empire State College. What is important are the underlying assumptions which gave rise to it, and I should like to explore some of these with you.

However, we cannot well consider this approach to education – the so-called "external degree" – without first considering American society itself. Institutions are supposed to reflect the life styles of their time, but the fact remains that the collegiate model which most of us still embrace reflects rather accurately the 17th and the 18th Century social context in which the American college was born rather than 20th Century needs and concerns.

Consider, for example, the social conditions that influenced the university a century or two ago. At that time, higher learning was intended only for the privileged few. The pool of potential students was small, and the pool of talented teachers smaller still. A college degree was a symbol of social status; it possessed a scarcity value which would have been severely diminished had it become widely available.

This also was a society in which long-distance travel was restricted. When the small-town lad from upstate New York went off to Columbia or to Yale, he was expected to stay put, except on rigidly prescribed holidays when he dutifully traveled home.

Furthermore, most of today's colleges were founded when the primary teaching device was still the human voice, not even aided by a public address system, to say nothing of tape recorders, films, television, or cassettes. There were, of course, books in those days – expensively printed and bound, and severely limited in supply. But all of this was not too serious, because the knowledge thought to be necessary to become an "educated man" was limited and fixed as well, or at least growing at a slow and dignified rate.

And, finally, this was an era which took the phrase *in loco parentis* with deadly seriousness. Students came to college in their early teens, and teachers devoted countless hours to inculcating in them manners and morals.

Chancellor Boyer of the State University of New York announced plans for Empire State College on July 8, 1971. The holder of master's and doctoral degrees from the University of Southern California, he has been a SUNY administrator since 1965, first as Executive Dean for University-Wide Activities and later as Vice Chancellor. He was appointed Chancellor in 1970.

Given all these circumstances, it is not surprising that the 19th Century college reflected a mentality both of *scarcity* and of *siege*. Knowledge – in the form of a curriculum, a faculty, and a library – had to be painstakingly accumulated, hoarded behind ivy-covered massive brick walls, and sparsely parceled out to the chosen few assembled on an isolated island called "the campus." And while the student was undergoing this four-year ritual, his behavior was scrutinized day and night, lest he bring ruin to himself and disgrace to the fragile enterprise of higher learning.

Inevitably, this "fortress" approach to higher learning proved enormously wasteful. Schools competed for faculty and students; they duplicated library holdings; they built complex physical plants with classrooms and laboratories, not only for educating students but also for housing them, feeding them, doctoring them, nursing them, amusing them – and, at least since 1910, parking them. Each campus, in this context, was viewed as insulated and totally self-contained. It was looked upon as an island, surrounded by a kind of psychological shield, an intellectual and moral oasis, a place which both probed the student and protected him from the outside world.

All of this analysis would be merely an exercise in curdled nostalgia were it not for the fact that so much of what took shape in that earlier time still survives today. The model of the self-contained campus, well rooted in a bygone era – and justified in the context of that bygone era – has been locked into an iron vise of custom. It has become a holy ritual which still forms our image of "the way things *ought* to be." While the world has been transformed around us, we still cling to a bucolic mental picture of higher learning that would have been entirely familiar to our great-great-grandparents.

This is not to say, of course, that colleges have not changed. In the realm of manners and morals at least, our goals have been scaled down. And yet, in most respects we still remain worshipful of the "fortress" model even though the context has changed and indeed has challenged the most basic assumptions on which the early format was established.

This brings me to my central theme, the *"Why"* of the External Degree. The thesis can be simply stated: I am convinced that, in nearly every way, the conditions which produced the classic "fortress" approach to higher learning have vanished and that a new kind of collegiate model must emerge, one that reflects the social conditions of *our* time. Let's examine the shifts.

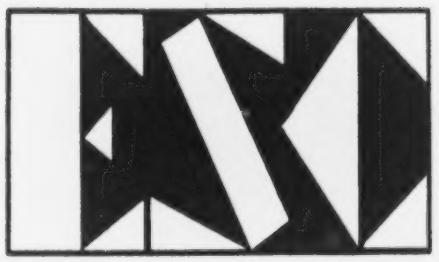
From an era of intellectual scarcity, we have entered an age of abundance. The challenge today is not that of hoarding together for a lifetime a limited number of scholars, but of finding ways for thousands of gifted, highly mobile teachers to be productively used.

Consider the communications revolution which no longer limits the passing on of knowledge to the face-to-face, foot-of-the-scholar, rabbinical relationship that dates back to ancient times. We now have television, both public and commercial. Indeed, our children between the ages of five and ten spend as much time watching television as they spend in formal school. Telephone lines and satellites now make it possible for students to converse with scholars halfway around the world. Computers store and transmit information with breathtaking speed. And with cassettes, students can "check out" the professor and take him home, listening or relistening to lectures at a time and place of their own choosing.

The point is simply this: Today's student is bombarded on all sides with new ideas in a multitude of ways. He does not need to travel each day to a distant campus, to the high and holy hill where the oracles are heard.

This impact was illustrated in a kind of homey way in our own family. When our seven-year-old son was still in kindergarten, one evening at bedtime I heard him reciting the alphabet instead of saying his prayers. I felt that, in itself, was a kind of puzzling shift, but I was pleased at his accomplishment. When he had finished, I remarked to him that I thought it was great that he had learned the alphabet after having been in kindergarten only three months. He replied, "Oh, no. I really learned it on Sesame Street but my teacher thinks she taught it to me." Not only had my son learned the alphabet, he had also acquired some insight into "the system." His teacher, who had probably followed the same lesson plan for years, had been "done in" by a little box in the living room. She was aiming to get to "Z" by June, while Sesame Street had made it before Christmas.

I would not bother to tell that little story if it had only kindergarten implications. The point is that we are living in a *world* of "Sesame Streets." There has been a transformation or revolution in understanding and information all up and down the line, but too many of us in higher education are confronting the new generation of college freshmen with the ABC's of our tired old lesson plans.



We are also in the midst of a transportation revolution. Even the "average income" student can study now at many different places throughout the nation or – with cut-rate overseas travel fares – throughout the world. We now have ribbons of freeways instead of rutted roads, and high speed cars can now place many of our formerly isolated campuses only minutes away. The nation's Capital is only an hour or an afternoon away from our campuses, and a weekend trip to see the Renaissance treasures of Florence can now replace a visit to the library to thumb through some worn and faded picture prints.

Clearly, the changes in communication and transportation alone in this century are, in my view, sufficient to demolish the notion that a college education must be limited to residence on a single campus for a four-year block of time. I am fully convinced that we must develop collegiate patterns that recognize that a network of learning resources can be reached by students easily and conveniently, and that it is no longer possible or necessary to accumulate all of the resources on a single spot called "the campus."

With this startling change in the location and style of learning, we have also witnessed a dramatic shift in the students to be served. During the past decade there has been a steady increase in numbers alone. In New York State, 72 percent of the high school graduates now go to college, and I understand that the percentage in California has now reached 80.

In just 10 years the number of adults engaged in formal learning (a segment of the population we have tended to ignore because of our notions that college was a kind of pre-adult cultural rite instead of a process of education) has nearly tripled – from 9.6 million in 1960 to 25 million adults today. And for most of these people, returning to college simply *cannot* mean a return to a full-time, Monday-through-Friday kind of operation. To them, the outmoded forms, the bankers' hours, the credit and curricular inflexibility do not seem merely quaint anachronisms; rather, they are viewed as frustrating evidence of a creaky structure unable to respond to new demands.

Clearly, we need different arrangements to accommodate the broad range of talents and special needs of the adult population. And I do not see how this group is to be served without more flexible and fully honorable nonresidential programs.

But returning for a moment to those young people who *do* come to us fresh from high school, the "young adults." They, too, are far different from their counterparts just a generation or two ago. On the most obvious level, they are different *physically.* Today's entering freshmen are three inches taller and 20 pounds heavier than those of 50 years ago. They enter puberty 18 months sooner and reach full growth two years earlier than their counterparts of 1920.

Academically, according to standardized tests of scholastic achievement, today's teenagers are a year and a half ahead of their parents' attainments at the same age. The reason for this is not hard to find. Our hypothetical "average youngster" is the product of a drastically altered public school system. He goes to school *longer* and learns *more* than ever before. In 1950, 77 percent of our children went to kindergarten; today over 90 percent do. Twenty years ago, less than 10 percent of our children were in pre-kindergarten programs; now the figure stands at 40 percent. Once the child – already a veteran of one or two years of school – finally enters the first grade, he attends more days per year than ever before. In fact, in the past 20 years, the average time spent in school per year by our pre-college student has arisen from 157 days per year to 170.

All in all, the student seeking admission to college today has had about 25 percent more formal schooling than his father had had just 20 years ago, and twice as much as his grandfather had had 40 years ago. With the dramatic change in the *content* as well as the length of instruction, the plain fact is that today's 18-year-old has attained a level of academic achievement equal to that of the junior college graduate of two decades ago.

Is it any wonder, then, that a growing number of young people feel "burned out" and bored by formal classroom instruction by the time they enter college? How can we reasonably expect young people to sit through 18 years of essentially similar patterns of teaching – from ages four to twenty-one or more – without occasional restlessness, spasms of revolt, or withdrawal into indifference?

What all of this adds up to, I think, is the simple yet far-reaching conclusion that most of our collegiate models still reflect the social and educational conditions of the past, and that millions of Americans are now looking for alternative patterns which reflect the changing realities of our time. I see the nonresidential college, the so-called external degree, as one

approach which recognizes that because of changes in communication, changes in transportation, changes in the age and intellectual ability of students, learning need not be confined to a single campus or to rigid blocks of time. I suspect that is the *"Why"* of the external degree.

I should note, parenthetically, that the external degree at this time of dollar crisis also can seriously seek to relate the cost of education to the academic services rendered, and strip away the myriad of extraneous functions which have slowly shifted our colleges from *in loco parentis* to, what a friend of mine calls, *in loco uterus.* While students are not interested in being governed, they are still considerably interested in being protected. And yet our campuses and our climates still pander to these competing demands.

Our multimillion-dollar physical plants may have served a useful function when a culturally insecure young nation needed tangible reassurance that scholarly activities were actually being pursued. But, I submit, for this generation – as it will be for coming generations – the *process,* not the setting, is the essential thing. What a step forward it would be if even a fraction of the hundreds of millions of dollars we now pour into concrete could be spent instead on people, to support the actual play of ideas, mind on mind!

I might add that this year we have submitted a new budget for the coming fiscal year for the State University of New York and we need an additional $15 million to open and maintain the additional square footage that's being completed before we start next September.

Let me add three or four qualifying comments to my central thesis.

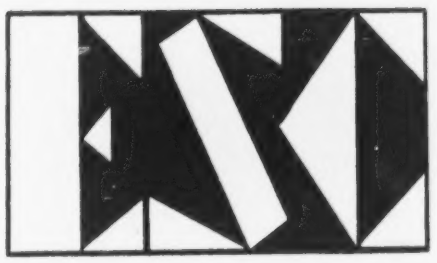
From what I have set forth, for example, it might be concluded that I believe the external degree approach will *completely replace* the conventional four-year campus-based plan. This, of course, is not the case. I would not completely rule it out as an extremely long-range possibility, but I think it highly unlikely that it will come about in the foreseeable future. Even by 1975, the students of Empire State College will still represent less than five percent of our total enrollment in the State University of New York. There will continue to be a majority of our students who, because of their interests or inclinations or a sense of tradition, will prefer – at least part-time – a conventional campus experience. And that is as it should be. The point is, however, that for a growing minority, the present hoops are unacceptable – and alternatives should be found.

One further observation: One of the most frequently expressed fears (and one I share) is that non-traditional education may threaten the relationship between the teacher and the student. If properly guided, however, quite the reverse will be true. I believe we can develop models of non-traditional study in which teachers can remain central to the educational effort, and I would not support in our system one in which they were not. Teachers and scholars have been intimately involved in the planning of Empire State College. Although it is a college without a campus, it does have a full-time faculty. And, although less formally structured than in the past, the encounter between student and mentor lies at the very heart of the approach. And I think the encounter and interaction can be rich indeed – possibly richer than the present design.

This brings me, finally, to a more general concern which advocates of the External Degree Programs must confront squarely. This is the matter of *quality.* There is concern among all of us about the so-called diploma mills, the fly-by-night operations, the easy, casual, deceptive exercises given a "collegiate" stamp. I think this problem cannot be ignored, but what it really comes down to is what we mean by *quality* in education and how it is to be measured.

Quality does not mean the number of credit hours on the student's transcript. Quality is not to be measured by the amount of time he has lived on a campus, or by the number of lectures he has attended. Quality is not guaranteed by forcing students to jump through an identical and well-worn set of hoops. And it is certainly not guaranteed by pouring millions of dollars into bigger and better buildings.

What, then, *do* we mean by "quality?" It seems to me that quality in education reduces itself to three simple fundamentals. What we need, first, is a student who wants to learn. Secondly, we need adequate resources that will help him to learn. Finally, we need a process by which the student can be properly guided and his progress rigorously assessed. If these conditions prevail, quality is found; if they do not prevail, quality is absent. It is as simple as that. I suggest that there is not necessarily a direct correlation between quality in education and where that education takes place. The three criteria I have cited can be met *off* as well as on the campus.



Therefore, I cannot agree that responsibly guided External Degree Programs are cut-rate operations that will cheapen the educational enterprise. Indeed, I would argue that in certain very significant respects such an approach actually tends to remove some of the deceptive crutches we have used as an escape from quality tests, and in the process could, in fact, enhance the quality of education.

John Gardner once said that there are times when institutions are shaped by the conscious, rational decisions of the men who lead them, but that that is not the only way institutions change. He said they can also drift and be pushed along by thousands of historical accidents, shaped aimlessly like the shifting desert sands.

I am convinced that this is a time to *lead,* not to drift. I further believe that this theme is a tribute to the vision and the educational leadership in California of Chancellor Glenn Dumke. What has happened in the California system in the past, what is happening now – and, I am sure, what will happen in the future – is inspiration for all of us at the far end of the nation. The prospects, I feel, are most encouraging. □

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The Press Meets The Issues With Dr. Boyer

To what extent was faculty involved in planning the State University of New York's new Empire State College? Can Empire State be fairly viewed as a cut-rate strategy to save taxpayers' money? How does it compare with plans in The California State University and Colleges? And what about a national program – one that transcends State borders?

SUNY's Chancellor, Dr. Ernest L. Boyer, responded to these and other questions put to him by a panel of newsmen. The panelists: Noel Greenwood, Education Writer, The Los Angeles Times; Carl Irving, Education Writer, The San Francisco Examiner; Judi Schultz, Education Writer, The San Jose Mercury; and Curtis Sitomer, Chief, Western News Bureau, The Christian Science Monitor.

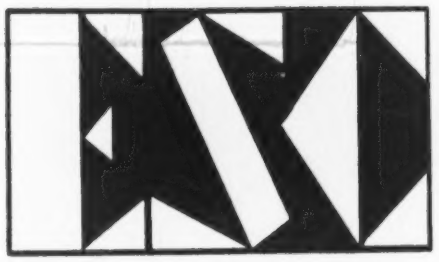
Mr. Sitomer: Dr. Boyer, do you foresee eventually a national external degree exchange program with somewhat free movement of students from one part of the country to another?

Dr. Boyer: I think this is inevitable. It seems to me that the central thesis that I stated breaks out of the geographic boundary. I see no reason why we have to stop short of a national program, or even beyond it, if we can develop credibility and common currency in some fashion. The potential is appealing to me.

Mr. Greenwood: In putting Empire State College together and planning it, how deeply was the faculty involved? Or was this something superimposed from above?

Dr. Boyer: I felt that the time was ripe for a State system such as ours to declare itself in terms of more flexible study, and we explored several possibilities. For example, one could ask each Faculty Senate to affirm its commitment to do this sort of thing locally, or one could design a model in which each campus would want to participate and become sort of a partner in a new collegiate design. A third alternative, and the one we pursued, was to create under the authority of the State University of New York another college. After evaluating it informally with a few faculty, the State University of New York Trustees, using the authority vested in them, created Empire State College. In this instance, it was a college which would not have a campus, but which would have its own autonomy – its own president and faculty – and would therefore be as fully free as any other campus to devise its own conditions of learning.

. . . By following this model, therefore, except in a conceptual and image sense, there was really no need to get final authorization of each local faculty at the established institutions. I met with our Faculty Senate on several occasions following the announcement and, since there had been earlier informal discussions, I think there was an awareness that this was done with candor and integrity and that it was not the intention to usurp the prerogatives which the faculty exercise regarding their own academic programs. I would add, further, that we did discuss this with the University Senate committees. We had an extended examination of its potential as well as the process of launching it. It is my view that there are no major political or procedural difficulties with this in our system.



Mr. Irving: Empire State is the first of its kind in the United States. So there is no solid evidence as to its potential demand. Are you starting this program on faith?

Dr. Boyer: Yes, faith, but also with a bit of common sense, I hope. As to the demand, there is no question about that. We have had a flood of inquiries from students – 12,000 to 15,000 now – and our problem is now to get this thing under control and keep up with our mail.

Mr. Irving: Is there a difference between inquiries and perseverance? A couple of years from now I wonder how many will still be enrolled.

Dr. Boyer: We fully realize that this entails high risks, because it does not have the comforts of concrete and the symbols of stability and certainty and eternity. The chance of its being criticized and collapsing – because it means carrying ideas in your head and not touching them with your fingers – is a risk we must run. The idea is different and new – and therefore fair game for the barbs of those who oppose change of any kind as well as those who are convinced that the conventional collegiate models are the most effective. But, in spite of the risks involved, I think the experiment is at least worth trying. It is my personal conviction that the need is real and that interest will be sustained. And I guess you could call that an act of faith.

As I said earlier, I think we must discard the notion that a college education is some kind of pre-adult ritual and that after a specified period of time one is "educated" and can forget the college and the lecturer and the books for the remainder of one's life. Because of the explosions of knowledge and the changing social context in which we work, I'd like to see us develop a model in which college would be a recurring cycle, so that when one receives his diploma perhaps he would also be given "a certificate of continued learning." It might even be a kind of interesting contract one would work out before leaving college, to serve as a reminder that it really is not the end but the beginning. The tragedy is that we're still following the finishing school model . . . I think we must come to terms with the recurring education arrangement if we're going to keep ourselves alive and if we're going to face up to the problems of increased leisure time. Indeed, I would hope the day would come when some of the contracts developed between labor and industry would result not in "another day off" but in "another day of learning." I don't think it is beyond the realm of possibility that sometime in the not too distant future there will be contracts where workers will spend four days in the factory and one day committed to learning, perhaps even with the college located right in the factory itself.

Mr. Irving: Is it another matter of faith that politicians and others won't see this as a way of saving money and substituting for the more conventional way of higher learning?

Dr. Boyer: Yes, it can be viewed by the cynic as a gimmick and by the politician as cut-rate strategy. My own view is that we should try to make moves in education that we think are educationally valid, changes that are needed. If in the process they happen to save money, well and good, but that's not the only reason we should pursue them. I do think, however, that if we are so frightened of people criticizing us or using for the wrong reasons any change we propose, we render ourselves immobile and thinking stops. If we simply retreat to a blind defense of all we are doing now as if it were eternally virtuous, and if we aren't creative enough to look for valid and educationally sound rearrangements of the status quo on our terms, then there will simply be a bleeding away and the whole enterprise will become increasingly anemic. Again, the risks are there. But I rarely talk about this as a financial venture, because if that was all it was, I would not have pursued it unless I felt some very fundamental and compelling educational principles were involved.

Mr. Greenwood: How have you gone about staffing Empire State College? Is its faculty permanent Empire State College faculty?

Dr. Boyer: We've had many applications. I may be a bit prejudiced, but I think some of our best faculty have found this idea attractive. An unusually strong group of people has been hired, some from campuses in the system and others from outside. The ratio is perhaps 50-50.

There are two kinds of faculty being hired, and I think there is a place for both. First, there is the faculty member who wants this to be his permanent full-time home – to the extent one can have a permanent full-time home in higher education. Then there is the faculty member whom I find rather intriguing, the one who says, "I'd like to come to Empire State for one to three years and be a full-time faculty member with you, and then I will return to the safety of the nest." I think this could be a very compelling process within the system. We gain the advantage of having a creative person who really is attracted to this, and he, in turn, can go back to a campus – either enthused or disillusioned – but at least he

would have had the experience of other models of higher learning.

Mr. Greenwood: Could you talk to the question of workload?

Dr. Boyer: We're frankly experimenting and playing this by ear. We are beginning with a student-faculty ratio formula which is almost double our present Statewide system average of 15 to 1. We're trying to work out an arrangement whereby perhaps 25 to 30 students will be assigned to a given faculty mentor. The mentor would, in effect, have responsibility for each of those contracts, each student's file. He may see some of these students once every week, once every two or three weeks, or once every month. In some instances, the student for whom he is responsible would be taking a semester of work in one of the existing colleges as a part of his contract. Several of the students are currently studying abroad, which is also a quite legitimate arrangement.

But to get back to your question: We are staffing the College now on a student-faculty ratio of somewhere between 25 or 30 to 1. That may prove, once we get fully operative, to be either too high or too low. We don't really know yet and we're keeping it open. This was a decision reached by the faculty in the College. Bear in mind, however, that we'll have no major library costs, no student personnel costs, no building and maintenance costs. We do have some lease and acquisition and refurbishing costs just to get these centers in shape for faculty offices, seminar rooms, and the like.

Mr. Miller: Continuing on the economic implications, isn't it likely that, rather than saving money as some politicians think, since you're going to be reaching a whole new population of students – students who might never even have considered going on to college – you're going to add a great amount to total State expenses for public higher education?

Dr. Boyer: That's a good point. We are making the opportunity available. Therefore, people who have not been able to find their way into a college, who simply drove around and pointed to it in the past, suddenly discover it is theirs, too. I think that's the much more critical question of how it relates to finance. In the "open university" approach, we are attempting to attract potential students who had considered themselves washed out. The first application admission process we've gone through shakes down to an average age of 29. We could keep this College filled with students who are at the typical collegiate age span, but I think that would violate its purpose and its spirit. In fact, I should like to see our campuses individually, quite apart from our Empire State College, think of this as a model for the 10 to 15 per cent of the students who would prefer to be under the general umbrella of the institution but not under the specific wing of the dean of students.

Mr. Irving: How much more has this added to your budget for the current year?

Dr. Boyer: We're budgeting an additional several million dollars for next year, which would be additive in the sense it is a new college and so it does represent new money. I might add, however, that Empire State students are now included as a part of our regular master plan projection.

Miss Schultz: Could you compare what you're doing in New York with Chancellor Dumke's proposal to have each campus in the California system develop its own External Degree Program under a systemwide framework?

Dr. Boyer: I have already touched on that very briefly. I'm not entirely familiar with the California pattern of development so I cannot speak with authority. But if I understand it correctly, the aim is to encourage the faculty of each campus to develop what amounts to a non-residential component of that institution. I guess I'd call it, in our terms, a mini-Empire State unit on each campus. I've described our own plan whereby we created a new separate college with its own degree-granting authority. I think in the long pull we should have in the State of New York – and, I would argue, probably in all states – a non-residential collegiate unit on each conventional campus to handle students who wish to continue that way. I think that's the long term impact.

I've never said this before because our Budget Office might find out and want my dreams to come true, but maybe the day should come when Empire State College will go out of business because the student can go down the street to a conventional college and decide to enroll in the non-residential division of that college instead of choosing a separate college with that as the single essential model. So California may, in fact, be moving with greater integrity, in terms of the system, than we are.

Continued on Page 72

UWW -- AN ALTERNATIVE FORM OF HIGHER EDUCATION

by Samuel Baskin

The premise of the University Without Walls is that individual students are more important than standardized institutions and structures.

The premise is that students have a great deal of unrealized potential that usual paths to academic degrees do not – and, in fact, cannot – entirely tap. The premise also acknowledges that, although risks are involved, they are fully worth the taking.

Another rationale is that for too long we have tended to look to the classroom as a single vehicle of instruction. It is a valid vehicle, but it need not be the principal one. People learn in various ways, and the University Without Walls attempts to encompass them all.

University Without Walls programs are organized at 20 colleges and universities under sponsorship of the Union for Experimenting Colleges and Universities. They represent an alternative form of higher education, uncircumscribed by time or space, individualized and flexible. And, although the term is shop-worn and blurred, and misused in years of angry campus rhetoric – it is relevant indeed.

Some 3,000 students are enrolled.

A 19-year-old coed at New York's Skidmore College wants to pursue a writing career. Skidmore puts her in contact not only with regular faculty, but with a non-faculty person who specializes in children's literature. She is meeting early success. Two of her books already have been accepted for publication.

A retired architectural consultant in Miami, Florida, commutes twice a month to Washington as part of a tailored plan of learning at Howard University. He speaks, reads and writes fluently in five languages. "My objectives are neither frivolous nor impractical," he states, "but because of my age I cannot proceed to their accomplishment by the slow conventional route." He is a candidate for a bachelor's degree at 71.

In San Francisco, the 45-year-old head teller of a bank had one year of college in 1945. He is interested in urban development. His schedule, charted ahead for many months, includes an internship as assistant to the Director of City Planning, attendance in a variety of seminars, and a stint in the Peace Corps.

At Providence, Rhode Island, a 35-year-old housewife is interested in elementary education. For six months she will work as a recreational therapy aide in the children's ward of a hospital. Then she will become a teacher's aide in a Montessori nursery school. She will enroll in seminars, engage in independent study in introductory sociology, and will take evening courses at Roger Williams College on human growth and development and introduction to education.

Piecemeal reforms within the traditional structure of the American college have usually proven palliative but not redemptive. Here and there, now and then, for a short time, various colleges have introduced independent study, field experiences, travel abroad, computer-assisted instruction, tele-lectures, inter-disciplinary courses and seminars, experiments with the admission of the previously inadmissible, more

intensive orientation and guidance programs, along with a myraid of extracurricular activities. None of these, and no combination of them, has as yet transformed the standard model of the undergraduate college, or eliminated student dissatisfaction.

But the pressures are mounting. More students apply for entrance and colleges despair of any significant improvement in their instruction because they are trying to cope with thou ands of students in facilities appropriate to only hundreds. The entrants themselves, apart from being more numerous, are also more diverse. They differ from one another, and from preceding college generations, in their values, skills and knowledge. No single prescribed curriculum, no set of optional "majors," is going to meet all these students where they are now, and nourish their continuous growth in curiosity, spontaneity, appreciation, understanding, competence, concern and character.

The University Without Walls offers the option of nourishment both to students and to tradition-imbedded institutions. In its broadest sense:

- It does away with the rigidly circumscribed campus by providing an education wherever students may be.

- It abandons the fixed-aged group, welcoming students, most of them from 17 to 60.

- It eliminates the usual concepts of classrooms, grades and credit by placing the student in a close working relationship with a single teacher-advisor-supervisor who oversees the student's individualized program of learning.

- It enlarges the traditional faculty by bringing students in contact with persons ("Adjunct Faculty" is the term most generally applied) having direct practical expertise – government officials, business executives, persons from community agencies, scientists, writers and other specialists who serve in tutorial capacities and conduct "seminar-in-the-field" programs.

- And, to financially hard-pressed institutions, it holds out the implication that, once under way, the qualities of purposeful learning can be both preserved and strengthened at costs substantially below those required in conventional classrooms. This is largely due to departures from regular faculty staffing patterns and the use of adjunct faculty.

The University Without Walls concept crystallized over a period of four years. It began to take form in 1967 when some 50 college teachers assembled for "Project Changeover." This was a workshop sponsored by the Union for Experimenting Colleges and Universities to develop ideas for improvements in teaching. A year of experimenting with ideas derived at the original workshop brought a conviction that the impact of individual change was limited unless it was accompanied by a similar college-wide change. From subsequent meetings the proposal for the University Without Walls – a consortium of participating colleges and universities (see listing on Page 33) – was conceived. It was funded in 1970 by the U.S. Office of Education, with subsequent grants from the Ford Foundation and UNESCO. These grants total $825,000.

The participating colleges and universities are large and small, public and private, inner-city and rural, predominantly black and predominantly white, two-year and four-year, secular and non-secular. They are located from the Atlantic to the Pacific, from the deep South to just below the Canadian border. Seventeen are members of the Union for Experimenting Colleges and Universities; three are not. The selection in all cases was quite deliberate – to test an idea with a spectrum that is representative of American higher education across the country.

Each participating college or university develops its own University Without Walls program. Institutional autonomy is not abridged by direction from the Union's central office at Antioch. All, however, agree to these basic components:

- Inclusion of a broad age range of students, as well as a broad "mix" of students. (This year about one-third are the typical age of undergraduates, and the remainder are older.)

- Involvement by students, faculty and administrators in designing and developing each institution's UWW unit. Putting students first in this listing is purely intentional.

- Special seminars and other procedures to prepare students for their UWW program before they actually begin the program itself. The same applies for faculty members and others who are to be involved in a UWW program.

- Flexible time units that are individually tailored and worked out between the student and his teacher-advisor.

- Use of a broad array of resources – including both classroom and non-classroom experiences (seminars in the

UNIVERSITY WITHOUT WALLS: PARTICIPATING INSTITUTIONS

Antioch College, Yellow Springs, Ohio; Bard College, Annandale-on-Hudson, New York; Chicago State University, Chicago, Illinois; Friends World College, Westbury, New York; Goddard College, Plainfield, Vermont; Howard University, Washington, D.C.; Loretto Heights College, Denver, Colorado; University of Massachusetts, Amherst, Massachusetts; University of Minnesota, Minneapolis, Minnesota; Morgan State College, Baltimore, Maryland; New College, Sarasota, Florida; New York University, New York, New York; Northeastern Illinois State University, Chicago, Illinois; Roger Williams College, Bristol, Rhode Island; Skidmore College, Saratoga Springs, New York; Shaw University, Raleigh, North Carolina; University of South Carolina, Columbia, South Carolina; Staten Island Community College, Staten Island, New York; Stephens College, Columbia, Missouri; Westminster College, Fulton, Missouri.

field, internships, tele-lectures, etc.) – all intended to benefit a student as he proceeds toward his academic objective, which is usually the bachelor's degree.

- Use of Adjunct Faculty in extensive Seminar-in-the Field programs so that students may draw upon their skills and experiences.

- Opportunities for students to use resources and facilities of UWW units in other colleges and universities.

- Concern for cognitive and affective learning (students should think and discern, to develop independently, and not to be dispensers of predistilled "facts"), and for devising new ways to assess the progress of students as they move toward their academic objectives.

It is impossible to generalize about UWW students except that they are deeply motivated and many of them are refreshingly independent-minded. One, a 38-year-old housewife, an amputee and mother of three sons, hopes to teach high school English. Several are 16 years old; they haven't completed high school but they are entering college under an early admissions plan. Another is a 50-year-old oil company executive who has charted a new career as a teacher. Several UWW students are prison inmates; the goal of at least one is to enter community development work.

At Morgan State College, Baltimore, there is the story of a coed who, after finishing her sophomore year, was just plain tired. "I was sick of sitting in the same classrooms every day, listening to the same people." Clearly, she had the "school blahs." The following fall she reentered, this time in Morgan's UWW program. She worked in a credit union at a Community Action Agency, getting paid for her work and getting credit at Morgan. She is quoted as saying: "My mind is really in this kind of program – for the first time."

At another UWW institution there is an example of an "undecided" freshman. He is 19. Things that come to his mind when he thinks about the future are social work, music, or becoming an elementary school teacher. The college has worked out a program in which he is scheduled for the first two weeks in a learning skills seminar. This is to help him acquire abilities to engage in independent study. Following this he takes a six-month field seminar taught by a sociologist, a city planner and economist, an anthropologist, a member of the college's philosophy department, an architect and a city official. The seminar centers on urban problems. The freshman will also engage in independent learning using both programmed materials and books from the Public Library. He will devote part of his time as an apprentice to the manager of the local symphony, and he will take regular introductory courses at the UWW institution in biology and education.

These examples are illustrative of options opening to students in the University Without Walls. Learning is infused with meaning and doing.

Altogether, some 250 Adjunct Faculty are involved with students enrolled at the 20 UWW campuses, and the roster is an impressive one. At Northeastern Illinois University, for instance, adjuncts include the executive director of the Sears Roebuck Foundation, the director of a Center for Curriculum Design, a senior anthropologist at Chicago's Field Museum of Natural History, the director of community and human relations for the Chicago Board of Education, and the manager of communications and education for Science Research Associates. Numbering among the adjuncts at the University of Minnesota – the largest public institution having a UWW

program – are the director of a creative drama group, the commissioner of libraries for St. Paul, a practicing psychologist, a staff member of Stillwater Prison and the president of a communications consulting firm.

How students are evaluated for degrees varies, of course, among the UWW units on the campuses. At the outset the student charts, with his advisor, an "episode" or "time-frame" which may be as short as a month or as long as 18 months or more. Methods of breaking away from the "credit hour" concept without sacrificing evaluative measures of experience comparable to that of an undergraduate degree program are being actively explored. Skidmore College and Northeastern Illinois University are experimenting with individual comprehensive degree plans. These identify work to be completed and evaluation procedures to be employed in attainment of the UWW degree but do not translate student program activities into any credit-hour base. Instead, they tie the degree to the accomplishment of given criteria.

The Union for Experimenting Colleges and Universities is itself chartered by the State of Ohio. This means the Union can award its own degrees as a consortium. Many of the participating colleges and universities plan to confer a UWW degree and are also providing students with the option to take the Union degree.

Since the University Without Walls concept has emerged, it has caught the attention of groups not ordinarily thought to be central in higher education. One such "spin-off" is the interest of the National Institute of Mental Health in formulating a program for persons in their last stages of drug rehabilitation, along with a program to prepare para-professionals in this field. The UWW model is being looked to for improved programs for teacher education and adaptation in high school curriculums. We've received expressions of interest from some 40 additional institutions of higher education in joining the UWW and plans are under way for developing an international component and for establishing five or six UWW Regional Centers across the country.

I go back to my beginning premise about the importance of students. It is true that most of them come into higher education largely unprepared for learning on their own. By and large we have conditioned them to come in, sit down and look up as the teacher delivers the lesson of the day. It doesn't need to be that way, and for students who can demonstrate maturity and motivation the promise of a richer reward through learning can be fulfilled.

One of the first University Without Walls students put it this way: "Most of what I want to learn will be learned by doing it. It's the only way to learn it. I don't admit to being without need of help. I need counselors and confidants. I ask for your help in my education, but I don't ask you for an education."

Dr. Baskin is President of the Union for Experimenting Colleges and Universities with headquarters at Antioch College, Yellow Springs, Ohio. Born in Lithuania, he holds master's and doctoral degrees from New York University. At Antioch he is Director of Program Development and Research in Education and is a Professor of Psychology.

"Mankind does nothing save through initiatives on the part of inventors, great and small (and imitation by the rest of us). These are the sole factors active in human progress."
— William James

FOUNDATIONS AND THE UNDERWRITING OF BETTER WAYS

by Robert E. Kinsinger

Foundations, I believe, must seek out and encourage the inventors, great, small, and sometimes obscure, and assist society in incorporating the best ideas into the fabric of its basic institutions.

There is danger in defining too narrowly the challenges and opportunities that are inherent in the current willingness to view higher education as a process not limited only to those activities that go on in college classrooms and laboratories. In the minds of many academics, the word "degree" in the designation "External Degree" may overshadow the more important notion of educational outreach wherein lies the greatest promise for educational invention. Human passion for the comforts of the organizational status quo can inspire prodigious feats of semantic gymnastics to create an appearance of change while cleverly arranging to proceed as before.

The degree may provide just the perfect anchor for the no-change advocates. Quality control, academic rigor and other familiar phrases may be used to obfuscate the issues. To many, degrees are unalterably tied to the network of departments, credits, requirements, courses, and grades which have been accepted as standard educational design. There is increasing evidence, however, that the existing system does not always relate coherently to human learning.

It can be anticipated that new educational activities external to the campus may also inspire a whole new system of organizing educational experiences on campus and for evaluating the achievement of educational objectives. In fact, the foundations are betting on it.

To avoid the obvious trap of generalization, let me offer a disclaimer: I cannot speak for all foundations. There are perhaps more similarities than differences between major private, general purpose foundations. However, my major reference base must necessarily be the W. K. Kellogg Foundation and its philosophy and operational framework. In varying degrees, the relationships that I will suggest between foundations and new thrusts in higher education can be applied to most foundations.

General purpose foundations usually govern their program of assistance by undertaking a continuous analysis of the major problems that confront society and to which at least partial solutions might be encouraged through the use of relatively limited but flexibly utilized resources. The best way to pursue such a course is to pick only a few areas of concentration and endeavor to focus on selected problems long enough to make an impact. This concept of an area of concentration is important.

As an example, the Kellogg Foundation has long been identified with support for demonstration programs and the dissemination of educational concepts which supplement the traditional scope of on-campus, full-time, youth-oriented concerns of higher education and instructional efforts. Perhaps the Kellogg Foundation is identified more than any other with Continuing Education. Frequently this identity is with residential centers for Continuing Education such as Kellogg West at California State Polytechnic College, Pomona, as well as with the nine other centers which are foundation-assisted at institutions in this country and in England. However, the bricks and mortar are secondary to the resulting significant new dimensions in programming models for university-based residential continuing education. The Kellogg Foundation has been searching for the inventors in this field for 20 years while trying to do a little inventing of its own. The Kellogg centers and their accomplishments are at least partially responsible for stimulating the development of more than 130 such centers at colleges and universities throughout this country.

Further, in its concern with the application of knowledge to the problems of people in the communities, the foundation has consistently searched for the inventors able to apply the idea of lifelong learning in a variety of settings. The largest single grant made by Kellogg in the hospital field has been in continuing education activities under the leadership of the American Hospital Association. The nationwide impact has been enormous. Kellogg Foundation some years ago supported one of the first efforts in higher education to respond to what may be termed "the empty nest syndrome" by helping to create a university-based Continuum Center for Women. This idea has now taken hold across the country.

The point is that because the foundation concentrated on this concern for an extended period, the inventors with ideas in this field knew where their ideas would at least get a hearing. Foundation personnel became aware of what had been or was being tried in the field. Foundation staff members were able to make a better than average estimate of the possibility of success of a new idea. Success in such cases is measured by whether a new approach, once proven feasible, is permanently adopted at the institution where it is tried and subsequently spreads widely. The multiplier effect is central to project consideration by a foundation.

Foundations, in seeking out and working with the inventors, have a somewhat unique opportunity of being a part of significant developments in education and yet being somewhat apart from them. Foundations deal with innovations, experimentation, and pioneering efforts, but they should by their nature be able to bring a different perspective to the analysis of educational problems.

In the context of grant-making activities by foundations, let me touch on three of the recurring themes that the educational inventors are currently exploring with us. Taken together, they may weave a potential pattern for the decade ahead.

First, there are many plans for broadening access to higher education. We are well aware of the significant changes in the educational structure that are steadily increasing the higher education opportunities for many of those previously denied access to post-secondary learning experiences. Discussions of External Degree Programs and Non-Traditional Study Programs have emphasized the search for new institutional forms. There are many efforts to serve in new ways some of the students who have traditionally benefited from higher education opportunities, but increasingly colleges are seeking to broaden their target groups.

Granting degrees and other credentialing is not the sole terminal point of college instruction. Few would advocate that colleges should be all things to all people. Certain types of institutions ought to serve certain types of target groups. The decade ahead will see even more intense efforts to serve those who can be identified as the educationally neglected. In many cases, these new students will not seek degrees. They will not wish to pursue the rigors of concentrated scholarly investigation – but they will want to learn. Appropriate short courses and unique learning experiences at unconventional but convenient times and in many unlikely places will be developed by the inventors.

The term "educationally neglected" does not just refer to racial minorities – the Blacks, the Chicanos, the Indians – although they surely must be served. To one degree or another the educationally neglected include *the disadvantaged* (low income, rural population, migrant workers, low income inner-city population), *the obsolete* (which in many instances might include members of labor, management, housewives and mothers, small businessmen, professionals), *those under stress* (some returning veterans, the widowed and divorced, the underemployed, the unemployed and the unemployable, criminals and the physically handicapped), *and the elderly* (both semi-retired and retired). Creativity in

Continued on Page 75

TAKING THE UNIVERSITY TO THE STUDENT

by Melvin W. Wachs

Dr. Wachs is Senior Program Officer, Community Planning and Management, U.S. Department of Housing and Urban Development. Prior to this appointment to this position in 1970, he was Director of HUD's Community Development Training Division for two years. A former Western Michigan University faculty member, he received his Ph.D. from The American University in 1968.

Through its "University Without Walls" program, the U.S. Department of Housing and Urban Development takes education to the student wherever he may be. Presently there are about 6,000 students in 20 States, plus servicemen and Federal employees in Asia, Africa, Europe and Latin America, enrolled in the HUD program or in university programs adapted from it. We expect this number to double by July 1972.

HUD's response was to long felt needs of Federal, State and local agencies for well-prepared professionals and paraprofessionals, and to the almost desperate pleas of the inner-city minority and disadvantaged for access to those educational opportunities available to their more affluent neighbors. Ours has also been a response to the frequent criticism voiced by the academic community, industrial and public executives, that contemporary universities are not "relevant" and do not prepare persons for a life's work.

Concisely put, HUD's "University Without Walls" project involves a highly flexible educational format. It encompasses a new educational technology in combining formal instruction through intensive seminars, on-the-job training, and work experience; a very liberal and quite flexible academic mix of requirements – credit for life and work experience, an opportunity to "challenge" the system through examinations, and other features. This means an ability to literally take the university anywhere (hence "without walls") and to use the very best people as faculty, wherever they may be physically located. Unlike most other "without walls" programs now in existence, where the student must come to the university, HUD's concept is that the university is there to serve the student, and must come to him.

HUD's program provides a teaching technology suited to in-service hours and work requirements (intensive one week, or three-day, or two-day sessions, plus readings, assignments and course outlines offered far in advance); curricula pragmatically tailored to the needs of students and agencies with both general theoretical exposure and highly work-oriented programs of education; equivalency examinations; and recognition of work experience credited towards a degree or certification goal.

There is complete compatibility and exchange of credit with every other university or institution in the system, including a nationwide consortial network. Accreditation is provided for certain university-level training experiences the individual may have had through Federal, State, local or private sources. There are highly trained counselors who make regular visitations to program sites. University-agency liaison; special on-the-job work-study programs; tutorial and research work done for credit in the agency environment; team and individual teaching by the best qualified instructors drawn from universities, government agencies and professional associations; programmed learning and tele-teaching techniques – these are all components in HUD's UWW programs.

Developmental costs are low. This is because the base system is already developed and in operation, and a university can adopt it in toto if it so desires. The basic investment is man-hours spent acquainting staff with the details (and they are considerable), and an outlay of time to set it in motion. There is a very real economy of scale, which can be realized through volume.

Universities in HUD's program have sought advice of many of the most distinguished academics and practitioners in scores of occupational fields. These individuals assist in rendering judgments as to how much practical experience at what levels might substitute for how much, and what kinds, of academic work. For example, assume that a recent enrollee had never taken formal training of any kind in financial management, but now sought to round-out and pursue studies in that field, and seek a BA in Public Administration.

Through our intensive counseling process this student (an actual case among thousands), who had worked in a local governmental unit's budget and finance office for five years, was counseled in depth by a highly trained counselor. His work record was examined in detail to determine how much knowledge he had of public finance, auditing, accounting, and administration, so that formal course work could be relinquished in favor of acknowledgment of life experience. The counselor also analyzed non-university training experiences the student had undertaken (such as workshops in municipal finance, orientation sessions run by local universities and junior colleges, and so forth), in terms of academic content.

On this basis, further buttressed by guidance tables with respect to level and field of experience supplied the counselor by distinguished professionals and professional organizations in each field, the counselor arrives at a mutual assessment of the student's present level of knowledge and ability. He tentatively awards a "credit equivalent" for life and work experience. This equivalent might be further tested, if the counselor and/or specialist(s) in the student's field wished to do so, by submission of a formal paper, and/or by oral and/or written examinations. The formal credit equivalent, by the way, is not recorded automatically on a student's transcript by the university. Students must demonstrate their level of ability by taking formal courses, by examination, and/or work study experiences at the higher level of competence and knowledge accredited through counselling before a transcript credit release is authorized by their counselor.

Students have access to advanced accreditation in the already widespread College-Level Examination Program (CLEP) system, which we find highly academic in approach and limited in applicability to traditional academic subject matter, but nonetheless a "start." There is also a tailor-made "CLEP" system available to participants in HUD's program: "Challenge Examinations." These exams are reversions to an almost forgotten academic past, to the time when students did not have to attend formal courses (attendance was never taken) and could prove themselves (as they still do by the thousands at the University of London or the Sorbonne) by examination alone.

In certain universities in HUD's system, students may elect to demonstrate mastery of any subject field, any subject, or even any degree, through an examination conceived for them by academics and specialists in the field, and administered at their behest and on a schedule convenient to them.

All recommended work-study and formal courses must, of course, fit into a curriculum focused on an educational objective.

HUD has established a self-operative, voluntary system in cooperation with professionals and professional societies to help overcome limitations of in-house faculty in determining life-related educational needs, and in planning life-related curricula. In about 20 career fields, participating universities and HUD have worked with panels of highly qualified practitioners drawn from government and industry, and with scores of leaders from academe, in creating new and relevant curricula. HUD has designed complete courses, listed suggested readings, suggested how to apportion classroom and study time in each course, and related the whole to a new dimension of flow of study through work, classroom exposure, tutorial and other kinds of educational experiences. These curricula are then modified even further, as applicable, in counselor, student and supervisor conferences.

I noted that HUD's program incorporates work experience as an enormously important facet. Since our objective is to provide a form of what in recent years has been referred to as "continuing education" for those already in or about to enter jobs, we sought to make education an important part of a student's work, and vice versa. That is one reason why supervisors are usually counselled along with students. Thus a student together with his or her supervisor will work out with a counselor, faculty member, and/or academic specialist, a program that combines reading and tutorial experiences and work assignments. He will be judged by the totality of his product, against a clearly defined educational objective in his field, set by counselor, faculty,

supervisor and student. His work-study program (not internship, please!) will be intensive, and may yield a better immediate work product to his agency as a bonus.

Aside from work-study, tutorials, challenge examinations, and assessment of life and work experiences, there is available formal learning, garbed in less traditional guise. With the basic objective of fitting learning to the needs of the student rather than to the cycle of the seasons, we have divorced our academic structure of formal learning experiences from harvests and holidays.

HUD's system has permitted its university associates to organize and run classes in an entirely different manner than in the past. They have, for example, set up "multiple track" courses. This teaching technology has also made it possible for participating institutions to literally utilize the very best faculty to be found anywhere – for they may be brought from all parts of the nation and may be career academics, agency and/or private sector people, with high qualifications. To teach, one need only spare a complete week off the job, rather than four to twelve months. Preparation time, follow-up, and post-course evaluation, while very, very intensive, are usually done at home in cooperation with professional teams, the university staff and agencies.

Participating universities are able to pay visiting professors at about double the going rate for contemporary Continuing Education expenses because the programs are self-reimbursable. One HUD project is designed to radically change the nature of traditional correspondence instruction, so that its "University Without Walls" may reach clientele with first-rate study materials anywhere in the nation in situations where formal classes are not practical. Individual student learning packages (instead of the traditional series of readings and questions followed by an examination) will include lectures recorded on easy-to-use tape cassettes; tape-slide presentations (inexpensively made for the individual student, but more complex for agency use); video tapes and movies for agencies. HUD anticipates this approach will make low-cost undergraduate instruction available to thousands of State and local personnel, and will appeal particularly to minority and disadvantaged persons wishing to enter public employment.

HUD is also arranging complete educational programs with jurisdictions, transporting its "Universities Without Walls" to them to serve their total range of needs for staff training. Involved are Urban Renewal, Model Cities, Housing, Planning, Codes, administrative and other HUD-related agencies. When feasible, local school systems, police, public health and other affiliated agencies have joined the program. A television series designed to bring instruction to blocs of individuals in a geographic area, coupled with learning packages and "challenge" systems; assistance to elementary and secondary school teachers and school systems in training teachers to incorporate urban-related materials in students' curricula, and other new and innovative materials to assist university faculty in revitalizing curricula and courses in HUD-related areas of interest, drawn from materials incorporated in HUD Programs, may soon be added.

Our program has been accepted wherever it has been introduced. Local authorities have been the prime movers. We conclude that the reason HUD's UWW is so much wanted is basically because a void exists in higher education – a gap that traditional institutions do not and cannot fill through contemporary management and educational policies. We have also assisted in establishing complete "universities without campuses," if you will, in towns and cities where none existed. In many instances these programs range from arts associate to masters, and even Ph.D. levels.

All of the students are not government employees or military people, although HUD has not as of this writing encouraged associates to go beyond meeting immediate Federal, State and local educational needs. However, in the course of implementing the program, hundreds of housewives, businessmen, employees of local banks and corporations and "men in the street" have enrolled, eager to advance their education. A small number of 20-year-olds also is enrolled in the program full time.

Through HUD's system, about 15 administrative employees – organized as a separate management system – can actually run a UWW program for as many as 6,000 students at widely scattered locations. The key man is the Director, who reports to the Provost, President, or Chancellor of the institution. His is a role with completely delegated authority – to run programs, to admit students (we do *not* suggest that admissions be referred back to the regular Registrar and Admissions staff for processing), to contract, and so forth. He, in effect, runs a miniature university, and perhaps even in some cases a multiversity. Under him may be an Associate or Deputy Director for Program Development.

Continued on Page 74

EXTERNAL DEGREES--THE VIEWS OF A SKEPTIC

by Lewis B. Mayhew

Dr. Mayhew is a Professor of Education at Stanford University and the author of several publications critical of aspects of higher education. The holder of a Ph.D. from Michigan State University, he has been a member of the Stanford faculty since 1962.

The current interest in external degrees and "universities without walls" could well be a fad, fraud or romantic fantasy.

- It is politically intriguing because at once the concept touches the egalitarian sentiment in American society but in an inexpensive way.
- It possesses considerable dramatic appeal because it sounds innovative and attune to a technological society.
- It appeals to the elite of a meritocratic society because it allows for mass credentialing without jeopardizing the avenues by which limited numbers of people became part of the elite.
- Very likely it also attracts some administrators, seasoned in the wars of student liberation, because it allows the educational bureaucracy to continue but to keep large heterogeneous numbers of students at some distance from the campus.

The various proposals seem to rest on several fundamental, but as yet untested assumptions. The first is that there is a demand (as contrasted with need) for a college education as it presently is offered which will be obtained in non-traditional ways. The point about need can be stressed by recalling that the University of Pittsburgh almost went bankrupt when it assumed that a need for year-round operation equalled a demand and that students would really use a trimester system. The State of California also tried that path with the same results. Students don't attend summer session unless there is a real payoff.

Secondly, it is assumed that a carefully contrived blend of programmed materials, independent study, some contact with professors via television coupled with some face-to-face contact and a rigorous examination program will produce equivalent educational gains at equal or less cost than through traditional ways. The assumption intrigues, for so much orthodox practice consists of transmission of information, a function admirably suited to television.

Thirdly, it is assumed that if a genuine social need exists to increase the number of educated or trained people and to maintain a society of people who will be experiencing formal education throughout their lives then faculty members will change old ways and adopt new ones for substantially the same rewards they now receive. A system of external degrees is conceived of as demanding different roles for professors. Creating programmed material is different from classroom performance – and more difficult, too. Lecturing via open circuit television demands different preparation than does lecturing in the sanctuary of the lecture hall – and a more polished performance as well.

It is also assumed that a credential-conscious society will, with some minor variation, accept degrees and certificates achieved in new ways, as generally equal to those acquired through more orthodox campus experience. The very stress on external degrees underscores this emphasis as does the argument that these degrees can be obtained without the expense of going to or living on a campus.

A minor assumption is that legislators really will support a moderately expensive educational effort which is not visible in a local community. There is good reason to believe that in a number of states wise use of existing private college campuses could eliminate the need for as many as 10 new 10,000-student campuses. However, legislators are intrigued that those really unneeded campuses should go in their districts. Witness in California the frequent arguments to convert junior colleges into four-year institutions.

And, overtly, it is assumed that the external degree is a way by which education can be made available to the disadvantaged, the poor and to minority group members. In this regard it is of the same order as the land grant or junior college idea – to extend education to the agricultural and industrial classes.

All of these assumptions are laudible. No one quarrels with efficiency, economy or democratization. But they do run counter to some at least warrantable assertions. The first of these is that for high school graduates most likely to attend and to profit from higher education as it is presently practiced – higher grades, high aptitude and high socio-economic level – existing colleges and universities are now at almost the saturation point. Of that sort of student, some 80 per cent now attend college. When one moves on down to the student who must make up the clientele of the new external degree program – the low achievement, low aptitude and low socio-economic level – one finds such serious lack of motivation or survival skills that even if they do enter a junior college, they drop out relatively soon after matriculation. One can seriously question whether this new student could even be tempted into considering, much less persevering, in the self-discipline to pursue tasks which through school or through family influence are regarded as unpleasant. The high and sustained drop-out rate in public junior colleges has established that availability of educational opportunities can increase intake, but that output of people with a credential or even a coherent set of educational experiences does not automatically follow.

Secondly, there is mounting evidence of the lack of relationship between what is studied in school and how one performs on a job. It is true that high school graduates and college graduates do earn more than do people without those credentials, but this appears more to reflect hiring criteria than the relevance of the substance of what one studies. Should the public become aware of this and should the courts begin, as they have, to question the validity of tests and education levels as criteria for employment, much of the demand for formal certification could evaporate. Without the motivation of the credential would students tolerate an external program which presents somewhat distasteful and ineffective learning? There is in this regard the additional point that extending a credential to more and more people will not enable those on the low end of potential to enter the desired middle-class fields. Someone has remarked that they dreaded the day the first waves of Blacks entered the labor market armed with a bachelor's degree, only to find that it was not a passport to preference.

Then there is the fact that egalitarian moves in education have generally aided those least in need of assistance. The chief beneficiaries of the land grant college movement were not the children of the poor but of the middle-class who could obtain a cheaper college education while their parents could use the funds saved for other purposes. There is a similar suggestion that free-access junior colleges aid first those who could afford to go elsewhere and only in a minor way children of the poor. The Open Admissions program in New York seems to have aided most the children of the white middle-class. Now the external degree is a reflection of egalitarianism, but it could well prove to be just another inexpensive way by which middle-class youth make their way into middle-class vocations.

External degree plans, if they are to work, will require a substantial change in life-style of professors. Yet every analysis indicates that professors rarely change and even then reluctantly. The idea of credit-by-examination has been around a long time. It was central in the program of general education at the University of Chicago in the 1930's and at Michigan State in the 50's. Yet gradually faculty members were able to dilute the system until grading was returned to their own unreliable hands. The Advanced Placement Program was a well thought out device to provide for better articulation between school and college. Yet 15 years after its inception, the program only affects about 60,000 students a year. Professors don't want students to receive credit for work not done under their own direction – if not their own teaching. Generally, professors have objected to objectivity-scored examinations in spite of impressive evidence that they are more reliable, better balanced and more discriminating than essay examinations. If an external degree plan is to affect large numbers of students, it must use a variant of objectivity-scored examinations – rejected by professors – or essay examinations which are expensive, burdensome and

which generally have fallen into disuse when large numbers of people were involved.

A goal of external degrees will be to increase still further access to higher education. Yet there can be serious question concerning increasing access without giving equal attention to retention. Here the California experience with its Master Plan which stressed access through junior colleges is instructive. The State did increase the proportion of high school graduates who entered college, but on most other measures such as the proportion of high school graduates graduating from college, the State dropped relative to other regions in the country. Now the junior colleges were at least physical places with which students could identify, hence had some holding power. The external degree idea will have no such physical presence and will likely experience an even higher attrition rate than have junior colleges.

While much of what I have said may sound hopelessly negative, the comments are not intended to discourage examination of the matter, experimentation and, when appropriate, adoption of programs. One should be quite skeptical. The track record of adoption of major changes in American higher education is not good and the odds are that this one, overly publicized, will also fail. But the times may be sufficiently different as to produce success. There may be enough people around who do need a flexible way of continuing their education as to create a demand. It may be that the entire matter of credentialing is so in flux that the educational community will be willing to try seriously a new approach. And there are several intriguing experiments:

- Development of teaching materials by academic teams, with pretesting.
- Attention to individual learning and prior experience (Empire State College).
- Formal recognition of learning experience outside the classroom at the undergraduate level has been true of much graduate and professional education (e.g., Minnesota Metropolitan State College).
- Legitimate attempts to eliminate redundance (e.g., CLEP examination at San Francisco State College.
- Easing up on prerequisite and residence requirements for adult students and stop-outs (e.g., Regents' Degree Program at New York State).

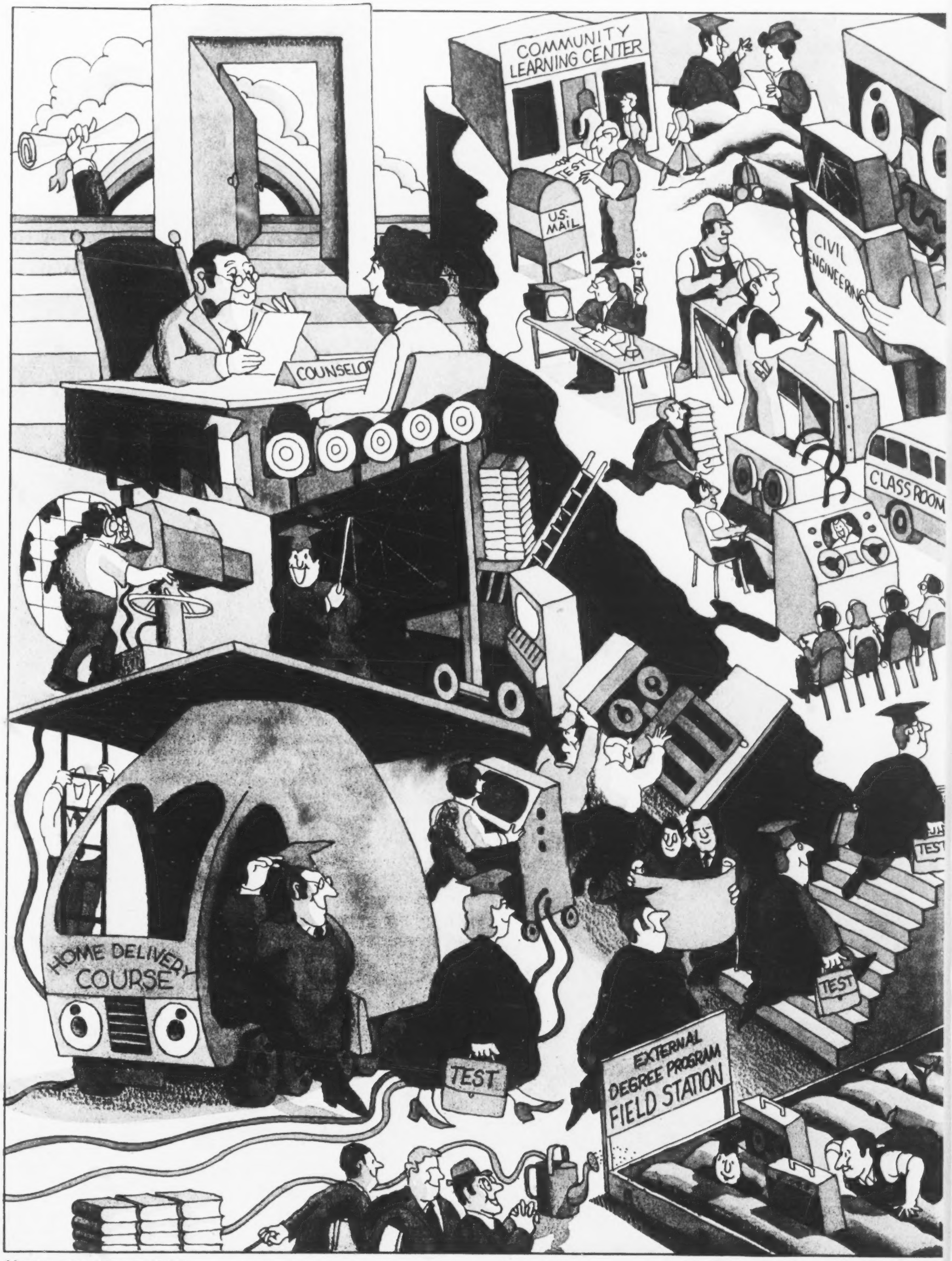
My own best guess is that, on balance, interest in external degrees is warranted. They will likely never become a large element in the American educational enterprise. But out of the discussion there may come a general loosening of requirements and regulations in the mainstream kind of institution. And this will be good. □

NARROWING THE FOCUS TO CALIFORNIA

" . . . I've always wanted to go to Chico State and yet there have always been, well, the economic reasons. I would have had to raise the money in advance. Also, I've had to work and there are family responsibilities. One cannot just pack up and go off to a college more than 100 miles away any time you feel like it. And so, though I've always had this big ambition, I've not been able to fulfill it.

"Until all of a sudden here comes Chico State and it says, 'We'll bring the school to you.' "

Roma Mortimer, Student
Chico State College External Degree Program
Susanville, California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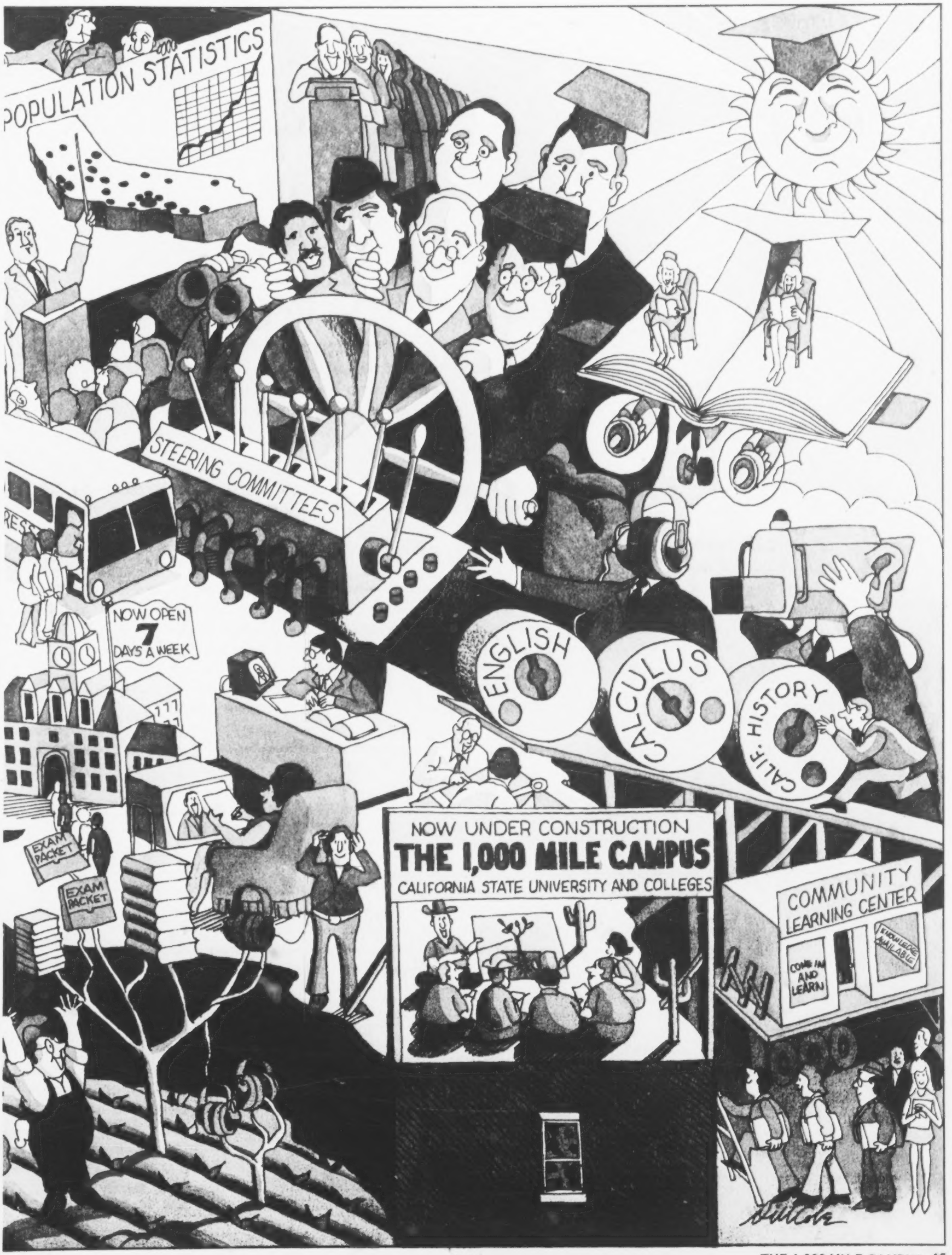
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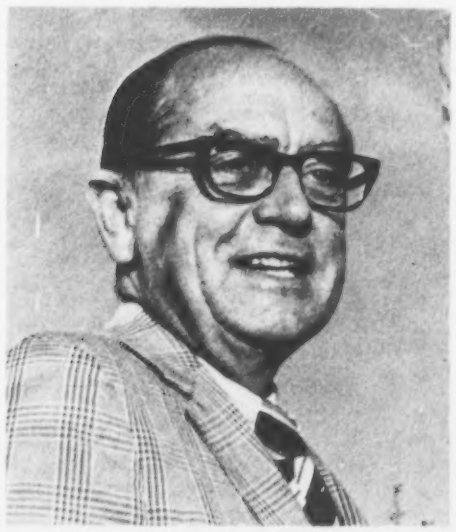
by Thomas H. McGrath

A COMMISSION AND ITS WORK

President McGrath of Sonoma State College is Chairman of the Commission on External Degree Programs of The California State University and Colleges. The Commission was established in April 1971 by Chancellor Glenn S. Dumke. Prior to his appointment at Sonoma State, Mr. McGrath served in administrative capacities in the Office of the Chancellor and at California State Polytechnic Colleges at Pomona and San Luis Obispo.



One of the first tasks of the Commission on External Degree Programs was to develop an operational definition. The term "external degree" has come to have many meanings since it was first used to describe the examining process and the awarding of degrees by the University of London to candidates who were not University of London students.

I am informed that, during a discussion last fall relating to the Commission's work, a recording secretary was asked what meaning was conveyed to her in the words "external degrees." She replied that she didn't really know but had mentioned it to her husband, and he believed it meant to the temperature outside.

We have arrived at a definition, however, which is clear to the Commission. As our definition took shape a decision was reached that programs in The California State University and Colleges would lead to *regularly established academic degrees.* It then became apparent that the name of the Commission, itself, was a misnomer. There will be no *external* degrees. The Commission could more appropriately be known as the Commission on External Programs Leading to Degrees, but its members decided to live with this inaccuracy rather than change to a more accurate but longer and more cumbersome title. However, the point is important. There will be no special degrees designated or recognizable as degrees earned through external programs.

The definition of "External Degree Programs" in the California State University and Colleges, recommended by the Commission and approved by Chancellor Glenn S. Dumke, is:

> *External Degree Programs will be self-support programs of instruction and assessment leading to regularly established degrees of The California State University and Colleges. They will be upper-division and graduate programs designed to serve adult Californians for whom degree and certificate programs are not now available because of their inability to spend extensive periods of time 'in residence' on a college campus.*

Individuals from elsewhere in the country, and those familiar with external programs elsewhere, will recognize immediately that the California definition excludes programs which others call "external." Conversely, there are now programs in The California University and State Colleges – and there will be more – which could be described as "external" by other definitions. For example, several campuses within the system have offered degree-oriented "extended day" programs for many years.

There is no claim that our definition is superior to others. It is merely a statement which defines a particular program within The California State University and Colleges.

Non-Traditional Study

Not all of our external programs leading to degrees and certificates will be "non-traditional" programs. In fact, during the early years in particular, it is probable most programs will provide traditional models of teaching-learning. For these programs the chief non-traditional feature will be the provision of degree or certification educational opportunities to a traditionally unserved population.

Unquestionably, there will be an infusion of innovative modes of instructional delivery. Undoubtedly, models for assessment will be introduced to evaluate the educational *attainment* of candidates without regard to the formal and informal, traditional and non-traditional *processes* through which they had produced this attainment.

It is the Commission's belief that change should be deliberate, and its results should be evaluated. It is also fundamental to the Commission's mode of operation that faculty should be involved throughout. The reasons are two-fold:

- Faculty constitute the Academy. Theirs is the largest and richest reservoir of relevant expertise.
- The credibility of degrees to be awarded will be largely dependent upon faculty acceptance and endorsement.

The California Strategy: Pilot Projects

The Statewide Academic Senate endorsed Chancellor Dumke's January 1971 call for New Approaches to Higher Education with the advice that innovative activities should be introduced as *pilot projects* and that major attention should be given to the development of the *designs* to be used in *evaluating* the pilot projects.

In response to the Senate's advice, the Commission on External Degree Programs recommended to the Chancellor that all programs be established as pilot programs, with specified beginning and ending dates, and that 10 per cent of the budget for *each* project should be utilized for evaluation. In addition, rigorous guidelines for evaluation have been established.

During the pilot phase of development the Commission is encouraging maximum diversity in types of majors, instructional delivery systems, staffing methods, and approaches to financing within the self-support structure. Regularization, in the opinion of the Commission, should follow, not precede, what will be a period of learning based on experience with many different types of projects.

The Role of the Commission

Membership of the eight-member Commission includes college presidents, representatives of the Chancellor's administrative staff, the faculty, and Deans of Continuing Education. The Commission is advisory to the Chancellor. It has no administrative responsibility. It is not part of any campus or system administrative structure. Relieved of daily administrative demands, released from the requirement of moving through bureaucratic channels, responsible only for the soundness of its advice, the Commission is free to be far-ranging and free-wheeling in its deliberations.

The Commission's functions include making recommendations regarding procedures for developing and submitting pilot proposals; criteria to be used in considering proposals; guidelines for evaluating proposals; guidelines for administration of pilot programs; the administrative structure for external programs which should be established subsequent to the pilot phase; and changes in legislation and Board of Trustees regulations.

Further, it is the Commission's role to:

- Gather and disseminate information regarding external programs and innovative approaches to external instruction in California, the nation, and elsewhere in the world.
- Stimulate development of pilot proposals.
- Consult with faculty and administrative groups within The California State University and Colleges regarding the development of programs.
- Conduct surveys of educational need throughout California to provide administrators and faculty within The California State University and Colleges regarding the development of programs.

- Utilize the faculty of the colleges to inventory and evaluate instructional materials and media which might be used in external programs.

- Seek and provide financial assistance to the campuses, when possible, for planning and development.

Proposals for pilot projects are submitted by the colleges to the Commission. The Commission recommends to the Chancellor regarding implementation of the proposals. Once pilot programs are implemented, their administration is the responsibility of the regular administrative structure of individual colleges and universities. The Commission's sole responsibility will be to monitor and *evaluate* these projects, and to report its conclusions to the Chancellor.

External Programs and Campus Autonomy

Responsibility for developing External Degree Program proposals rests with the faculty and administration of individual colleges and universities. All proposals must clear the usual on-campus academic consultative processes before they will be formally considered by the Commission. Initiative for development remains with the academic community on each of the campuses which, after all, comprise collectively the academic and intellectual strength of the system.

Regional and Statewide Consortia

Employees of eight large public agencies of the State of California are the subjects of a survey of educational need. The survey is under way. Data from these surveys can be expected to provide useful information for establishing External Degree Programs in many areas of the State. The survey of State employees is being complemented by a statewide survey of representative samples of the general adult population.

It is anticipated the survey of State employees will produce information warranting a number of specially designed professional programs to serve special classes of agency personnel. For example, such a major might be developed to serve Youth Counselors in the California Youth Authority. Such majors will be established by Curriculum Development Teams comprised of personnel of five or six of our colleges and universities, as well as agency representatives. Where lower division work is required it is expected that Community College representatives will be invited to serve on these teams.

Statewide curricula to be developed will be oriented to the educational and professional interests of agency employees and the development needs of the agency. The agency will have the advantage of knowing that its employees in San Diego, for example, will be in the same curriculum as those in Fresno and the Eureka-Arcata areas.

Several of these statewide curricula, according to present plans, will be offered by consortia of The California State University and Colleges. Community colleges and perhaps private colleges and campuses of the University of California may be parts of one or more of the consortia.

There also may be regional consortia. One, currently in the planning stages, would provide a criminal justice major for the law enforcement personnel of one eight-county region. One campus of The California State University and Colleges would provide instruction in the major field. Three other institutions in the system which do not offer instruction in criminal justice will provide courses in related and elective fields.

The administrative structure to define the nature of the inter-relationship of colleges and universities in the consortium will be negotiated, in each instance, as the specifics of instructional requirements become more evident. The role of the Commission will be one of leadership and facilitation – not decision. The degree will be awarded to the student by the institution from which he had taken the work in his major field or where he and his mentor have developed his "educational contract."

Resident Credit and Other Policy Changes

It became evident in the Commission's early deliberations that several changes were necessary in the California Administrative Code and the Standing Orders of the Board of Trustees. These include:

1. Restrictions on resident credit for courses offered through extension in external programs leading to degrees must be modified.

2. The fee structure must be modified to make it possible to pay faculty at their regular rate of compensation for teaching in external programs as part of their regular teaching load.

3. During the pilot phase there must be a change in the requirement that all majors offered in external programs be part of the college academic master plan, or must go through the lengthy process which culminates, at one Board of Trustees meeting each year, in the addition of majors to the master plan.

These three changes were recommended by the Commission and were brought for consideration to the Academic Senate, the Chancellor's Council of Presidents, the Advisory Committee on Continuing Education, and the Deans of Continuing Education. After the proposed changes received the support of these groups they were presented to the Board of Trustees by the Chancellor. The first, on residence credit, was adopted by the Board of Trustees in January. The other two changes were approved by the Trustees at their meeting on March 22, 1972.

A Credit Exchange?

There is always some danger in discussing prematurely in print ideas which have been presented only once to the Commission but which have not yet been submitted to the hammer and forge of broad consultation within the academic community. However, one such idea is the concept of a California State University and Colleges Credit Exchange.

Stated as a question, is it possible (or desirable) that a Credit Exchange should be developed having the features described below? Should there be a Credit Exchange which would:

- Evaluate an applicant's credit previously earned in a variety of educational institutions and record the credit on a "California State University and College Transcript."

- Offer advice and counseling regarding on-campus or External Degree Programs in which the applicant could complete the requirements for a degree; or, possibly upon the completion of additional work, if necessary, be awarded a CSUC degree.

- Study and evaluate examinations, such as the College Proficiency Examinations of the University of the State of New York and examinations developed by the College Entrance Examination Board, Educational Testing Service, and American College Testing, to determine the feasibility of using these as a basis for which to award units of credit or degrees.

- Develop and validate assessment techniques, including standardized tests, essay tests, oral juries, observation of performance, on the basis of which to award units of credit; or degree.

- Study and evaluate means by which credit might be awarded for:

  a. Experience.

  b. Education or training programs offered by government, business and industry.

- Enter into agreements establishing reciprocity with institutions of higher education in other states for the exchange and acceptance of such externally awarded academic credit.

- Establish as academic "legal tender," within The California State University and Colleges, all units of credit awarded on the transcript of the "California State University and Colleges."

- Negotiate agreements with each of the universities and colleges in the system regarding the acceptability of credit toward general education and major requirements.

I emphasize that these suggestions regarding a Credit Exchange are, at this stage, only ideas which have been presented to the Commission for consideration. The Commission needs and will seek the advice of the academic community in evaluating these ideas. At this stage, they are *not* Commission proposals.

A System of Self-Reliant Study?

An equally tenuous idea is one that centers on self-reliant study. The Commission has before it a proposal for a "self-reliant study consortium" which might become one of the functions of a Credit Exchange. The program would be designed for employed persons 21 and over. What would be provided would be initial diagnostic testing followed by guided individual study in which external students, working with a mentor, would be helped to identify, locate and use individual learning materials such as those developed by Individual Learning Systems, Encyclopedia Britannica, the Open University of Great Britain, other State systems or institutions and other resources yet to be identified. Credit would be awarded by individual assessment, utilizing any or all resources described in the discussion of the Credit Exchange. The program would be administered through a "self-reliant study consortium" coordinated through the Office of the Chancellor and utilizing mentors on each campus. Just how much of his academic work a student could complete through self-reliant study would be determined by faculty groups after full deliberation.

Serving Minorities and the Poor

The major goal of External Degree Programs is to offer upper-division and graduate instruction to adult Californians who, because of personal or economic circumstances, do not now have such an option. The Commission is keenly aware that *self-support* external programs, unless subsidized by public or private resources, will offer such an option only to the relatively affluent middle-class members of society because of the size of fees which must be charged.

The Commission staff is working with faculty on several campuses in devising proposals for external programs to serve members of minority groups and the poor, particularly those now employed as professional aids in career ladder programs. Special funding will be sought for these programs. Once the need for such programs has been documented and the ability of pilot programs to meet the need has been demonstrated, it is anticipated that, as a matter of public policy, funding will be provided to permit — on a regular basis — the extension of external educational opportunities to those individuals in all segments of society who demonstrate their ability to utilize the opportunity.

Testing Our Hypotheses

The Commission looks to the Statewide Academic Senate and other faculty groups to continuously remind us, as we become committed to our tasks, that our mandate is to test our hypotheses regarding the provision of educational opportunity through external models; that there is no defeat in the sustaining of *null* hypotheses; that the purpose of pilot programs is to find out *whether* (not to prove *that)* the maximization of diversity serves this purpose.

A Look Into The Future

My credentials as a seer were established years ago when I predicted that Wendell Wilke would defeat Franklin Roosevelt. Not to be dismayed by an occasional minor setback in my ability to look into the future, I share with you what I envision for tomorrow:

- The number of adults in external programs leading to degrees and certificates will surpass the total number of students enrolled in full-time programs on our campuses.

- The flexibility afforded through external programs will result in the development of new teaching-learning modes, new systems of instructional delivery, new ways of identifying the goals and assessing the results of education — and that what is learned from experience in the external programs will have a major impact on the way in which we organize and utilize our on-campus teaching-learning resources for our "regular" students.

- The Commission on External Degree Programs will go out of existence within a few years because the concepts it is advancing will become part of the regular fabric of higher education. □

CREATIVE RESTRUCTURING:

THE FACULTY ROLE

The proposition that education denotes change few would dispute. For some, education is increasing the amount of information a student possesses. For others, it is adding to or honing techniques of analysis. In both cases the focus is on what is taught.

Until recently questions as to how information is best communicated – or the techniques refined and improved – have stimulated relatively little interest in higher education. There are any number of reasons for this. Points of pedagogy were felt to be far more important at the elementary and secondary levels of education. Colleges and universities supposedly dealt with largely mature minds and needed no educational methodology or innovative or creative use of new technology to "spoon feed" their clients. The role of *en locus parentis* was largely restricted to the dormitory and seldom invaded the classroom.

Today there is a considerable and growing demand for change in higher education. It has many sources, public and private, from within Academe and beyond. It presents both challenges to a new excellence and a threat to established norms. The message is increasingly difficult to pass off as a transient and ephemeral whim of the unenlightened and immature. Its persistence and growth carry with it an implied threat: Either we set about the task of creatively restructuring higher education ourselves or it will be done for us. The issue is no longer whether to change. It is instead a question of what changes will be made and how rapidly – and under whose leadership and direction.

A primary focus of much criticism being directed toward higher education centers on the teaching process. Students not only have raised high the banner of "relevance," they have also protested (and with a vigor alarming to their elders) the impersonalization of education. It may be necessary to "do it by the numbers" in the Army, but college students object to being reduced to a code number in the eyes of the administration.

Mass education has long since reached post-secondary education. With it has come the evils as well as the virtues of mass production. More information may be transmitted to more students by use of auditorium lectures, but at the cost of considerable violence to the student's image (and that of his parents) of the ivy walls and good old kindly Professor Smith sitting under a tree on the commons discussing Spinoza with five enraptured youths. No doubt a part of the trouble we face is the discrepancy between image and reality, between the tree and the 1,500-seat lecture theatre.

by David H. Provost

Students are not the only ones dissatisfied with the form and substance of higher education. The public and their elected representatives have cast more than an occasional jaundiced eye at the campus in recent years. Both have become more than a little concerned with the amounts of money being devoted to public higher education.

Increasing demands on the tax dollar from many sectors of society have led legislators and governors to a less-than-open-handed approach to their colleges and universities. Already "tight" budgets have been slashed. Accusations have been made

regularly that current operations are inefficient, that too much "dead wood" has been allowed to accumulate. Nor are they altogether untrue, though the same may be said of General Motors, the State government or any other large enterprise. Thus the fact there is some wastage should come as no surprise to anyone. What is more to the point is what truly constitutes waste. And there's the rub.

Both the public at large and their representatives have been alienated by the developing life styles of some of our youth. Long hair, radical social and political beliefs, and a rejection of long-cherished traditions have come to be associated in the public mind with our campuses. A causal relationship has come to be assumed. Since John and Mary are attending college, it is their exposure to the atmosphere and ideas engendered by the faculty and a permissive administration that are responsible. That such a cause and effect relationship exists is highly questionable; that many citizens believe it to exist is undeniable.

Some faculty also have concluded that change must be made in the Academy. Many have concentrated on reforms of curriculum, others on greater student involvement in decision-making, and still others have sought changes in the form and process of what they see as an archaic learning style. Among the revisions suggested have been the abolition of all grades (as repressive, unreliable predictors of success, culturally biased), elimination of course requirements and, in greater or lesser measure, the abolition of lectures as part of the college program. Much stress has been given individualized learning experiences which would permit the student to create his or her own educational "package," one designed best to fit that individual's personal desires and vocational objectives.

It should be made clear that not all those professors who subscribe to one of these objectives – the abolition of grades – wholeheartedly or otherwise support other major changes. Most faculty tend to be strongly conservative when it comes to such matters as curriculum and performance evaluation. Whatever the public view may be of "liberal" professors, the fact is that close to home, in the classroom, the average professor, if there is such a thing, is likely to be quite reluctant to accept many changes.

Even among faculty, however, there has been growing awareness that change is essential if higher education is to continue to serve both the individual student and the society of which it is a part. The cost of education, the quality of education provided, the number of students to be served, the content and techniques of the educational process – all are coming under increasing scrutiny from a number of sources. Put simply, the question is who is to be educated – how, and to what end? Put more simply it is, "Education for what?" Answers are difficult. New ideas, and some old ones newly revivified, are now being studied, tested and evaluated on campuses across the nation.

Television, radio, film and tape cassettes, telephone retrieval systems and other methods of bringing the advances of modern technology to the service of education are seeing greater and greater use. The concept of advanced placement is hardly new but is being encouraged to an unprecedented degree. Credit for practical learning experiences has been granted at some institutions. The "stop out" system, permitting and even encouraging students to leave school for a year or more, later to drop back in with added maturity and purpose, has the endorsement of many educators.

One of the most often discussed and fastest growing of the "new" avenues to education is what has been termed an "extension of Extension" – the External Degree Program. It is not necessary to describe here the many varieties already in being. There are many "mixes" of independent study and traditional laboratory and lecture formats and there are virtues as well as drawbacks to be found in each.

What is of importance in the external degree concept is the emphasis on taking the university or college to the people rather than requiring them to come to the institution. The most obvious beneficiaries are what might be termed the geographically disadvantaged. These are people who live at a considerable distance from any accredited four-year institution. By accident of birth or occupation or marriage, these individuals are disadvantaged in obtaining a baccalaureate or master's degree. Others are unable to obtain the education they need simply because their specialized needs are not met by traditional curriculum offerings. Employees in public or private industry may be more than willing to spend the time and resources required to obtain the advanced education which reasonably may be provided only through special funding, perhaps in cooperation with their employers. Such specialized offerings have not normally been funded by the State.

Dr. Provost, a Professor of Political Science at Fresno State College, is Chairman of the Statewide Academic Senate.

The need for such programs has become increasingly apparent in recent years. Eric Toffler has given powerful support to those who see our swiftly changing society as the best argument for what is increasingly referred to as "Continuing Education." For the Australian aboriginal of Cape York peninsula of the west central desert region the problem hardly existed until modern times. Cut off from other lands and competing cultures, the society reached stasis in the Stone Age. So it remained for much of the Outback until the mid-20th Century. The educational demands on the young aboriginal were limited and after he learned them no more was required. The accommodation of man and land was unchallenged.

Such an accommodation had eluded us. We are faced with change in scale and scope far greater than any civilization's people have ever experienced. Our crisis has been variously described as atomic, ecologic, and demographic; in truth it is a crisis of adaptability. How can Man adapt; more, how can we as educators equip men and women to adapt in what, to the people of another era, would appear a social maelstrom? Changing roles call for changing skills, with the most basic skill that of adapting. We no longer can afford the operative myth that one is educated at 21 or 22. We cannot pretend that in four years of college we have provided a fund of knowledge that, unaugmented, may be expended over the next half century, adequate to carry the student from the classroom to the grave.

Nor is it enough to provide training in skills. To "educate" someone to be an engineer or nurse or agronomist or physicist alone is to ignore the fact that large numbers of people change occupations, by choice or otherwise, several times during their productive years. Even should they stay put, so to speak, the informational and analytical dimensions demanded in virtually any occupation are expanding dramatically. The threat hangs over us all – without a continuing effort to remain abreast of new developments in our chosen field, we may become obsolescent if not obsolete. The answer, at least in part, is to recognize that education must be a life-long project. The "college age" years must provide a base of adaptability, of growth or, to use Eric Toffler's term, "copability." The security we seek lies here. Traditional education may be likened to quicksand; it may create an initial illusion of stability, but without added undergirding it will only slow the eventual decline.

The Faculty Response

That faculty are, in general, conservative within the institution comes as a surprise to most outside the Academy. Society's image of the college professor has shifted dramatically in recent years. The state of benign disinterest was shattered by the demonstrations of the 60's. The "typical" professor no longer is seen as a gentle, slightly stooped, pipe-smoking idealist. Instead the public tends to envision a long-haired, bearded, pot smoking radical. Neither image is accurate, but images do have an important role in determining attitudes. Attitudes in turn have a significant impact on prospects for extended tax support for institutions of higher education.

Though it is true many faculty have been active in seeking changes of varying degree in the values and/or structure of society, as members of the academic community they have been, for the most part, resistant to any sweeping change. While society has been undergoing considerable alteration in recent years, the classroom has not. True, it has been redecorated and there has been an occasional reluctant bow to technology in the use of film strips and television. But even here most professors have stayed aloof. The 50-minute lecture remains standard.

In recent years students demanding a larger role in determining the form and substance of their education have come into conflict with long established faculty prerogatives. Student evaluation of the adequacy of the curriculum, of institutional policies, of professorial performance – and even in deliberations on retention, promotion and tenure – is, with greater or lesser justification, growing apace. With such changes has come resistance from those in whose hands the prevailing educational life style has been formed.

Skepticism is thus quite normal when innovation is proposed. This is attributed in part to faculty conservatism, but that conservatism is reinforced by the vast claims made by the proponents of innovation. Education often has been declared a panacea for the world's ills; now this or that innovative program is described as *The Answer* to all the ills plaguing education. For those nurtured within the present system, both its wholesale condemnation as worse than worthless and the miraculous curative powers of proposed innovative alternatives are hard to swallow.

Another problem, not related to the substantive merits of any particular program, is the pressure exerted by government for innovation as a means of cutting costs. Greater and greater demands of limited tax revenues have resulted in an intensive search for means by which education may be made less of a burden to the taxpayer. However reasonable from the vantage point of Sacramento or Albany, the concern of the professor is and must be first on the quality of the educational experience.

The difference may be summed up in the different emphases placed on the two words "cost effectiveness" by educators and legislators. For educators the stress is on "effectiveness." They almost automatically assume a defensive posture when questions of cost and economy are introduced. Legislators tend to stress the dollars and cents aspect of cost effectiveness. The two positions are not, of course, inherently incompatible. So long as quality is not impaired, no educator really seeks to waste resources. The legislator, on the other hand, certainly knows he would be serving his constituents poorly if his concern with costs led him to reduce support to levels that would insure that our institutions of higher education become classroom slums. Still, the differences in emphasis often lead the professor to conclude that quality is not the prime source of governmental enthusiasm for innovation.

There is also the assumption, implicit if not explicit in many proposals for innovation, that they will eventually eliminate "traditional" education. There is a great wave of enthusiasm building currently for more individualized learning experiences. The lecture, it is said, stultifies the learning process. In place of the regimentation of the classroom there must be a return to the Socratic model. Much more of this is indeed desirable. The question is how much more of it. Crass considerations of cost do play a part here. Mass education and the Socratic model may live side by side, but can one educate masses except by some means of mass communication? Or may the two be combined in retrieval systems and extensive counseling, and again, at what cost?

More fundamental to educators, however, is the question of whether all or even most students possess sufficient self-motivation and self-direction for the largely unstructured systems of individualized learning usually envisioned. For many, and perhaps most, students a structured curriculum, a formed and formal program of study, is necessary if he or she is to progress. Resistance to such sweeping change often is based on a belief there should be more options available in the learning process, not fewer.

Faculty apprehensions are likewise aroused when new programs are developed and implemented in what would seem to be almost indecent haste. Though this certainly has not been true of the External Degree Programs of The California State University and Colleges, the rush to give new programs permanent status in the absence of adequate predictive data relative to who is to be served, and how well, is bound to give rise to objections. No one likes having something stuffed down his throat; it is even less palatable a process when that which is being stuffed is unknown. The use of pilot projects to test new approaches before they are made part of the regular program – as advocated by the Commission – is essential if faculty support is to be obtained.

One source of apprehension lies in the public relations aspect of the program. It is quite natural for those developing and sponsoring a new approach to attempt to "sell" it as a major breakthrough, a dramatic advance. Such statements are usually directed to the public and their elected representatives. New programs demonstrate progressive and imaginative leadership and, as noted earlier, may just possibly have as a fringe benefit the saving of money. However, the process of making the "sale" tends to leave faculty somewhat apprehensive. A program originally viewed as experimental and/or limited in scope suddenly is made to appear permanent and imposing.

The picture of the External Degree Program remains blurred in the minds of most faculty, despite serious efforts by the Commission. Accounts of similar programs elsewhere indicate the possibility of a "come one – come all" policy. Though no official position has been developed, the faculty in The California State University and Colleges would appear to favor a more limited approach. The External Degree Program that "takes the university to the students" should do so, in the minds of most faculty, where it is difficult or impossible for the more traditional travel pattern to operate.

Any sudden expansion to include degree programs already accessible to the student clientele to be served and substantially the same in content as that offered on the campus will intensify apprehensions and resistance. The Chico State College program at Marysville, Redding and Susanville is readily defensible in this context. Those enrolled could not reasonably be expected to travel the better than 100 miles to

" . . . When I got to be 25 and 30 looked a little closer, and a middle-aged person was 40 years old, I realized I wasn't getting anywhere. Working in a Police Department is a dead end unless you have an advanced education.

"So a couple of fellows got together. Larry Long was one of them, and he came up to a few of us and said, 'Would you go to Chico State if you had the chance?' Everybody held up a hand. Then Larry asked, 'Now who is ready to get into a car pool with me and go down there from Redding?' And at that nobody held up a hand. We all wanted the education, but we couldn't make the trip to Chico . . . It takes an hour one way and we just couldn't go there on a regular basis.

"So we asked the Mountain if it wouldn't come to Mohammed, although we had our tongues in our cheeks and thought that the establishment is not going to come catering to a bunch of policemen who want to get educated.

"But we were very surprised . . . I think we ended up with roughly 15 who are directly involved in some form of law enforcement; they were from the Sheriff's Office, Police Department, Highway Patrol, Alcoholic Beverage Control Board – somewhere in the law enforcement spectrum. We also had a number of city employees – firemen, a few school teachers and some others.

"Of this whole group, I venture to say 80 per cent have completed or will complete this program. I don't think there's another school that can brag that they've got that high a percentage of completion. . . . "

Jerry Bronson, Student
Chico State College External Degree Program
Redding, California

and from the campus each day or even two days a week. Nor can most afford to take a semester or year off from their jobs or families to move to Chico.

A related concern is that self-financing programs such as are envisioned here could prove a back door means of introducing tuition to the State University and Colleges. The Senate has opposed the imposition of tuition and continues to do so. Even those who favor its introduction should reject the use of any vehicle such as the external degree as a device for bypassing normal policy-setting procedures. A program which is essentially the same as that offered on campus and which is open to those individuals within easy commuting distance and willing to pay certainly raises the spectre of tuition by indirection. Those fortunate enough to enroll early would clearly pay far less for the same product than those who need these regularly offered courses, find them full, and are forced to sign up for their external degree counterparts. Inadequate State support could quite readily stimulate a massive growth in regular offerings through External Degree Programs. With such a safety valve for increasing enrollment pressures, the temptation not to increase levels of State support might reasonably be expected to intensify.

The issue of quality is raised in any discussion of the external degree. Innovation, as noted above, bears the double burden of being touted by some as a cost-cutter and is, by definition, an affront to time-tested (and, in the eyes of most faculty, successful) modes of operation. Still a third burden lies in the fact that what for years was termed "extension" has been viewed by faculty as academically suspect. The requirement that courses be financially self-sustaining in the absence of State support led a few to lower standards so as not to frighten away "paying guests." Some members of the community have been known to complain bitterly when the standards of regular session offerings were applied with equal vigor in extension. The External Degree Program is also to be self-sustaining. The question naturally arises, will the same dilution of standards occur in this program?

It should be noted (before the Deans of Continuing Education descend) that considerable effort has been expended in upgrading extension offerings. Nonetheless, the image remains. Of course, the problem could well be solved by the simple expedient of providing the External Degree Program with full State support. Political and fiscal realities may intrude, but carrying the argument of geographic

Continued on Page 77

DELIVERY SYSTEMS FOR BREAKING THE MEDIEVAL MODE

by A. Daniel Peck

Several assumptions must be made in considering "delivery systems" for External Degree Programs.

First, we are dealing with a population whose desire is to learn. Their motivation is to achieve a learning goal which *they* have set and to which we should address ourselves. What we are delivering is the opportunity to learn, and this may be far different than what is considered traditional teaching.

Our second assumption is that we must be ready to stretch the boundaries of our conventional restraints on both teachers and students in the pursuit of our goals. This stretching process will probably require redefining of some of our traditionally cherished goals simply because we find that our definitions are ambiguous, vacuous, or unmeasurable.

Thirdly, we must address ourselves to accountability, both educational and financial. While these two parameters may often seem at odds, it is essential that cost effectiveness be a factor in any educational program in today's world.

From what we know of learning, we can develop some of the characteristics of delivery systems:

- Students learn through a variety of inputs. Reading, listening, and visual media all provide information availability. However, all students are not equally skilled in using all of these. Each requires some skills that must be learned.

- There is a direct and positive relationship between learning and active response. Students learn best when they are required to respond to the material and problems posed to them.

- Feedback and interaction are necessary to keep both students and faculty active and effective.

Any External Degree Program *must* operate within these guidelines. Any "delivery system" must be more than a transmission system. It must not only allow for two-way communication, it must require it. Such a system must also have variety and flexibility to allow for individual differences. And it must be within reasonable economic possibilities.

Some additional characteristics of the external learning experience must be considered. Location, as well as administration, is a major factor in learning. Shall the external program bring students to an adjunct center which becomes in effect a campus satellite? Or should students be brought together in currently available school rooms? Both elementary and secondary schools have space which is largely idle during much of the time the external classes might function. Military bases and business and industry locations have conference and training classrooms which might be available. Special learning centers which are not classrooms but a collection of individual learning opportunities possibly employing a variety of audio-visual or "teaching machines" are another alternative.

"... If we adopt the concept of the individual as a learning being, largely self-directed and interacting with a variety of learning experiences, we are less inhibited. We face, however, a significantly greater challenge in the development of the learning opportunity and its subsequent evaluation ..."

Emphasizing the Individual

Group size is a major consideration. Classroom type operation at any center requires a minimum group of approximately 25 to 30. No maximum limitation exists except that imposed by available space. Large groups, however, tend to suggest that adjunct facilities are necessary. It is also possible to consider the individual or small seminar as a workable group size. If delivery can be developed to homes or business locations without requiring the presence of the instructor then it is feasible to operate without large or expensive adjunct facilities.

The concept of education is probably the most important element in planning External Degree Programs. If we adhere to the "Medieval Mode," requiring the presence of a live instructor in front of a group of students, then we are restricted to the remote replication of the resident campus with all of its time and space limitations. If, however, we adopt the concept of the individual as a learning being, largely self-directed and interacting with a variety of learning experiences, we are less inhibited. We face, however, a significantly greater challenge in the development of the learning opportunity and its subsequent evaluation. There is a responsibility in either case to reassess and improve the educational experience – to make it more effective and more relevant, and particularly to validate it.

Currently, we have a large number of options at hand. We have used all of them enough to assess their usefulness. Our experience in regular extension operations would lead us to believe that the teacher, supported by books and transported from the college to what becomes in effect an adjunct campus, is an effective mode of instruction. This can be just as good as, but not better than, the same operation on campus. It is not an improvement for the student except perhaps in convenience. It is less effective if the milieu of the campus is important in the learning process. It is also less effective if non-transportable equipment is essential to the learning task, as in the case of science laboratories. This perpetuates the current mode and requires nothing new, nor does it provide reassessment and evaluation beyond that which now exists and is admittedly inadequate.

Turning to Television

If we wish to be concerned with large numbers we might turn to television. Our current and past experience has been well-researched in comparison with regular campus offerings and many findings of "no significant difference" have been reported. While this certainly seems to say that we can substitute television as a teaching method, it may also be identifying the classroom as less effective than it might be. The comment should really be addressed to the *design* of instruction. The lecture class on campus is often a *transmission only* method – one that precludes interaction as much as does the same transmission on television. Nor is there more peer interaction in many on-campus lectures than occurs with a television class.

With television, the key to improvement is careful design of the instruction to relate to the learning experience. In television classes where interaction with student study materials is incorporated into the presentation, response is required – and learning and motivation is improved. Recent developments for electronic feedback offer a direct interaction potential on cable and closed circuit television systems, but it may prove too costly for use within the near future. Coupled with television, it is also feasible to use peer discussion groups to provide interaction and integration of information.

Television production costs have been variously reported from $1,600 per course to above $30,000. The cost is relative to the type and style of the production and may be reduced, if courses can be reused, to very little on a per student basis. Further, a large collection of courses exists which have been produced for college classes and can be obtained for very small fees. When these fees are distributed over a large number of students, costs are relatively insignificant. It is well within cost factors, for instance, to pay rental fees *and* have an instructor available for either voluntary seminars or planned interaction via telephone.

Connections by Cable

With the advent of cable TV in most communities potentially to be served by external programs, capabilities are considerably enhanced. Many campuses have the opportunity to interact directly with the cable television outlet to a considerable number of students with no new equipment or production.

Currently available are more than 1,000 college-level courses (or parts of courses) already recorded. In addition, there are a considerable number of courses on film which can be used on TV, either broadcast or on cable. The cost of either

" . . . Most courses (presently available on film) have received sufficient use to provide validation data. If our campuses can rise above the NDG/NIH (No good/not invented here) prejudice, a ready source of material for immediate use exists . . . "

film or TV tape courses averages about $600 per course. Most courses have received sufficient use to provide validation data. If our campuses can rise above the NDG/NIH (No good/not invented here) prejudice, a ready source of material for immediate use exists.

Innovations from Ma Bell

The telephone has been suggested as a delivery system for a variety of uses. Its potential, however, remains almost completely untapped. It lacks the sense of physical presence that is more apparent though less real in television. Ma Bell has come out with several innovations, however, which may make it a more usable medium. The "tele-lecture" capability which makes it possible for a teacher to be in contact with a distant group in a two-way conversation is relatively inexpensive. If it is feasible to utilize a State lease line the cost can be as low as $3.50 per 50-minute period. Through this means it is also possible to have an external group join an on-campus group making a broader use of teacher time with minimal cost.

One of the most effective uses of the telephone may be the feedback capability it offers for telecasts. The hardware modifications have come from "talk shows" presented on radio and television. They allow calls to be "stacked" so that many callers can be accommodated. It is possible in this mode to have questions asked, screened and answered by category. This removes one of the objections to televised presentation since it is then no longer a one-way medium.

Pictures and Sounds and Keeping Costs Down

In our concern for the exotic and electronic we often overlook other, more simple means of delivery. A considerable number of slide-tape or filmstrip tape courses and parts of courses are in constant use. They are easily transportable, adaptable to individuals or groups. Business and industry have used this means effectively for years for sales, maintenance, and executive training. Production can be relatively inexpensive and controlled by the teacher. Production equipment is available in most colleges; it can be handled by many Audio Visual Centers. Distribution is feasible through library check-out techniques, mail or messenger. Use of this particular medium allows a learning opportunity for groups which are too small to be handled effectively in other ways. Spread over a relatively large number of presentations, costs are within acceptable limits.

The cassette tape recorder has presented another excellent possibility for simple, inexpensive delivery. Several researches have shown that a series of tape recorded lectures can be as effective as a similar series of classroom lectures. Cassettes employed for this purpose are easily recorded, copied, and are distributed by mail. Cassette tape recorders are widely available at modest prices. It is as reasonable to ask a student to provide himself with a recorder as to require a text, particularly since it may serve for a number of courses. Cassette tapes may be sent to the student who has his own playback almost anywhere in the world. Evaluation can be by mail in response to a tape recorded test.

Programmed instruction has been both praised and condemned. Early attempts with programmed materials have left some bad first impressions. As the producers of these materials have become more sophisticated many of the original shortcomings have disappeared. Currently there are more than 5,000 instructional programs extant. Most areas of mathematics, much of the physical sciences, certain languages, many business topics, and a large number of electronics courses have been programmed. The armed services have found these to be remarkably effective—both as whole courses and as adjuncts to courses. Programs cover a spectrum from the exotic computer-assisted variety to the simple linear paper and pencil kind. They have in common, however, that they are for the individual, require active response, and are usually validated. Thus they represent a uniquely accountable system that can operate without regard to numbers and often without an instructor.

Devising the Best "Fit"

This is by no means an exhaustive list of the means of delivery for the external degree effort. The list does not represent a *system.* Delivery systems should be developed on the basis of best "fit" and may well incorporate several means within a course. It is reasonable to suggest that a particular course may be presented in the following manner:

The topic is American History, usually offered as a freshman or sophomore course.

- A series of eight 30-minute televised sequences, each presented at least twice over open broadcast and/or cable. The sequences would include several short filmed segments and comments from the instructor. Their primary purpose is to provide a cohesive multi-dimensional historical sense not

possible in verbal presentation alone.

• A series of 10 one-hour cassette tapes mailed to registered students at one-week intervals. The tapes offer information and some recorded speeches of the great men of the period. They add to the television presentation but offer the added advantage of review at the learner's option.

• A programmed sequence incorporating a group of short selected readings. The sequence provides purely cognitive material except where it offers the opportunity for problem solving and simulation.

• Tests mailed at intervals – to be completed, mailed to the college, electrically scored and returned immediately to registered students. The final examination is to be delivered in the same way.

This course is time-contingent only with respect to the televised sequences. All other time elements are controlled by the student. Instructor reaction can be made available by telephone. The system utilizes each technique where it is most effective in relation to the kind of learning and cost. For the total course the first-time cost would be relatively high – but each successive offering would reduce the per student cost. Enrollment is limited only by the ability to process student feedback. The course could be handled from the home campus to any student within the broadcast or cable TV effective area. It might be offered simultaneously from several colleges in metropolitan areas with each college servicing its own registrants. It is also feasible to service students from satellite centers or within institutions or industrial plants.

A Michigan Success

Another course designed for use within a learning center away from the campus might incorporate a series of slide tape presentations. These could be used individually in the center at the learner's convenience. Interaction with an instructor would be possible at any time. Group meetings might or might not be planned as part of the learning experience. This method has been successfully used at Oakland Community College near Detroit for the last five years.

An instructor at an off-campus center might effectively work with a relatively large number of students in several different classes. If the students were utilizing individualized materials, class size in any one of the classes would not be a significant factor. The operation might remain comfortably cost effective with a student/teacher ratio of interaction at a lower level than on-campus courses but a higher student *use* factor since the materials would absorb most of the student interaction. The size of each class could be widely different. With this system, in any geographical location it would be possible to provide for mass and very special needs at the same time.

External Degree Programs have at their disposal an almost infinite combination of potential systems utilizing many of the subsystems we have readily at hand with off-the-shelf materials. The potential also exists for devising new techniques and new mixes with an improved and more exotic technology.

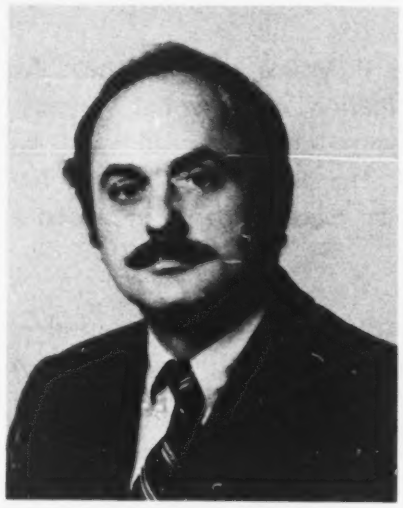
We can move ahead – if we will allow ourselves to think broadly and not be inhibited by tradition or pessimism. □

Dr. Peck is Director of the Educational Technology Center, San Francisco State College. For the past six years he has engaged in research on the improvement of college teaching and the application of systems analysis to educational technology. A Professor of Education whose doctorate is from Stanford University, he has been a San Francisco State faculty member 20 years.

EXTERNAL DEGREE PROGRAMS —

by Frank R. Siroky

A Professor of Psychology at Sonoma State College, Dr. Siroky is conducting market surveys for the Commission on External Degree Programs of The California State University and Colleges.



One of the obvious priorities of the Commission on External Degree Programs is to learn the extent and nature of the market–defining groups within the population who would be interested in participating in External Degree Programs, and determining the kinds of programs in which they would be interested.

Prior to the undertaking of pilot studies we had hoped to obtain certain precise data to aid in defining specific groups we might survey. For example: What proportion of individuals start in the State University and College system and never complete a degree? What proportion of Community College graduates wish to enroll in a four-year institution but find it not feasible or possible to do so? What occupational groups might be interested in External Degree Programs? Is there a data-based indication of need among impoverished and minority groups? How many extension or summer session students seek the opportunity for additional degrees or advanced certificates?

Unfortunately we found no data to answer these questions. There is simply very little information related to the extent which our educational system is working and available to those for whom it is designed to serve.

It might be argued that one really does not need a market study to determine what degree programs are needed and which, if instituted, will succeed. For example, it does not take a high degree of perceptiveness to judge that a master's program in psychology, especially counseling psychology, would be over-subscribed in almost any area of the State. Likewise, a bachelor's or master's program in business offered as an External Degree Program would almost undoubtedly find enough students for adequate support in an urban area or perhaps even in a mobile suburban area.

But we still do not have the complete data required to indicate the essentialness for any of a variety of other programs, nor the important ramifications for the development of innovative means of delivering educational programs to those students – the educationally disenfranchised citizens – who might desire it.

Pilot Surveys Authorized

Two Northern California surveys have been authorized to examine the feasibility of doing full-scale market surveys, to determine the kinds of questions which should be asked and to study the type and usefulness of the information which would be forthcoming from the major surveys. Our intent in these pilot studies is to develop a model or a plan for such future surveys that might be useful at each of The California State University and Colleges campuses.

Unlike the usual poll or market survey of an already existing product, we recognize that a survey for "External Degree Programs" represents certain interesting and unique problems.

In the first place, instead of going to a well-defined population and asking specific questions to determine how it feels about an issue, as is done in the usual poll or survey, we are faced with the initial problem of attempting to find and define the population to be surveyed. We're trying to bring these people "out of the woodwork" so we can ask them questions.

A MARKET EXPLORATION

Secondly, while colleges and their products have been almost as ubiquitous in California as a box of Kleenex, and External Degree Programs represent a new idea, we are in the position of asking the population to answer questions about an intangible not yet in existence.

Our pilot surveys have disclosed that we cannot simply ask the respondent if he is "interested" in the External Degree Program, nor simply if he might be interested in obtaining more information about enrolling in such programs. When we have done so, unfailingly the respondent, whether he be a recent Community College graduate, a former extension student or a member of the "population at large," gives a resounding "yes!" However, for purposes of program planning this "yes" response is spuriously high, and gives us an over-inflated picture. We were, in this case, asking the respondent to say "yes" or "no" to education. Few individuals are going to say "no" to such things as education, apple pie, and (in the past, at least) motherhood.

Another complexity is trying to find and sample the opinions of minority and other educationally disenfranchised groups. Typically these individuals are not responsive to the usual kinds of surveys.

We compound our task by the fact that the External Degree Program intends to engage in innovative means of delivery and instruction, thus making the definition of the potential market an extremely difficult task and one wherein a survey may lead to relatively unreliable information.

Through these pilot surveys we are testing basic strategies of sampling, means of asking questions – and the kinds of questions themselves which should be asked.

Reasonable Expectations of Market Studies

What can we reasonably expect to find from our market surveys? Stepping out from under my researcher's hat for a moment, let me make a few generalizations about possible data which might be forthcoming.

First, I think we should be able to provide some factual information regarding the demand for External Degree Programs and perhaps, as well, heretofore unsuspected data which indicates that these programs would be supported by students.

The second thing we might reasonably expect from the survey data is the identity of the potential group(s) who might be prone to come to an educational institution for External Degree Programs. Against this data we could measure the effectiveness of our program in offering the services that people might potentially need. Furnishing this kind of baseline data for evaluating the effectiveness of an educational program in reaching individuals puts us one step ahead of our usual college offerings.

To go further out on a limb and project what I think might be some of the perhaps unsuspected results of the survey, I make the following observations.

I suspect we are really going to be amazed at the number, and high proportion, of individuals who come "out of the jungle" and indicate an interest in External Degree Programs. For example, in one small pilot study in a rural area we found that more than 40 per cent of individuals in a random sample of the population indicated their interests in an External Degree Program. Their response was based upon reading advertisements in the newspaper or viewing commercials on television.

Furthermore, some probably will be surprised at the relatively low proportion of these verbally interested individuals who will ultimately end up enrolling in, and paying for, these programs.

I think there will be an element of surprise at the number of enrollees in extension and summer programs who are extremely interested in obtaining an additional or advanced degree. The strength of their motivation may also be underestimated.

I would predict that a high proportion of 20-year-olds will be interested in External Degree Programs. One reason for this is that this group already has a high degree of education.

In addition, some preliminary data indicates there is *not* the envisioned high degree of interest within the 30 to 40-year-old group.

Furthermore, other data indicates that income level, number of children in the home and sex may not be accurate predictors of enrollment.

On the other hand, most would agree that a high proportion of individuals who have attended night programs in the Community Colleges will be interested in obtaining further work. For example, in one sample, 2,500 night school students were asked: "Would you be interested in obtaining a college degree in a non-residence status from a college near your Community College?" Approximately 1,000 responded. Fifty per cent of respondents indicated they would be interested. Even with an 80 per cent discount factor, we can still see that there might be, in this one case, a fairly strong program possible at the very beginning.

All these tentative "conclusions" are based on very little hard data. We are engaged in a major undertaking in Northern California and hope to have more meaningful facts and figures on which to base not only the institution of a variety of External Degree Programs but also refined methods which will help other colleges and our work in defining the market for External Degree Programs throughout the State.

One question remains. Once we uncover these potential students and describe their educational needs, can we develop programs to adequately serve them? □

Advanced students seeking to earn a Master of Public Administration degree from California State College, Fullerton, meet in Santa Ana Civic Center with Dr. William J. Petak, associate professor of political science. Fullerton's External Degree Program began in February 1972. College is considering utilizing such additional locations as a community college and military bases.

THE COMMUNITY COLLEGES: POTENTIALS FOR PARTNERSHIP

by Norvel L. Smith

What happens in the development of the external degree concept will have an impact on the two-year Community Colleges and the students they enroll – an impact as great as any to be felt by potential constituent groups in California. Merritt College in Oakland will serve for purposes of illustration.

Merritt has gone through a number of stages, from being considered the strongest academic junior college in the State to being the most notorious, and to being an old institution on a new campus that can now realize its full potential. Merritt has the characteristics of the prototype urban Community College. It has the typical racial and ethnic mix, with about half of its 6,000 full-time students being made up of minority group members and the other half being regarded as the "Spirit of Berkeley." This is because the University's campus is nearby.

As in other typically urban Community Colleges, some 60 to 65 per cent of our students are over 21. The new 18-year majority law, however, makes virtually all of our students adults. Hopefully, this also will be the basis for finally getting away from a paternalistic relationship with students, since even 18-year-olds are now considered mature members of the community. About 40 per cent of Merritt's students are married, and from 50 to 60 per cent come from low-income families.

Merritt has a close working relationship with two campuses of The California State University and Colleges where the overwhelming majority of our graduates enroll. These are Cal State at Hayward and San Francisco State College. We have a rather interesting advanced enrollment program with these two institutions and with the University of California at Berkeley, a program that permits about 200 of our minority students to take one course each quarter at these four-year institutions. It is a significant program and very gratifying to us. In fact, the people at UC tell us that these garden-variety second-year Merritt students have achieved, over the first two and one-half years of the program, a grade point average higher than that of all the freshmen and sophomores at the University.

There are important implications in External Degree Programs for one particular segment of the Community College constituency – our vocational-technical or occupational students. For a long time we did not have these students at Merritt because our institution started out as the liberal arts branch of the old Oakland City College, with Laney College across town as the vocational-technical branch. For the past seven years, however, both Merritt and Laney have been comprehensive institutions and we are gradually moving toward a more normal mix, although presently we still have only 15 to 20 per cent of Merritt's enrollment as vocational-technical.

This could be due to a number of circumstances. It could be attributed to the fact that these specialized programs are expensive both in terms of equipment and staffing, or that the image of these fields is still somewhat negative, particularly for a population such as ours that is one-half minority. We might say that it is due to ineffective counseling, or that we have allowed too many of our young people – particularly our minority young people – to think that the only thing

worth doing is going to the University of California and getting a Ph.D. in sociology. This has happened despite the fact that at Merritt and at many other Community Colleges in California we have many outstanding programs in vocational fields, programs such as nursing, X-ray technology, police science, electronics, radio and television technology, and data processing, not to mention the hardware courses in the trades that are tied to apprenticeships. We have the resources to provide real options, but we haven't had many of our young people taking advantage of these opportunities.

However, I believe the major reason so few people from our kind of constituency are going into the technical fields is this: *They fear they may never get a chance to complete a four-year degree* because of the unrealistic residence requirements and other rigidities of the four-year institutions, which have always felt that the clients have to do the adapting if they are to be served. Fortunately, the War on Poverty and some of the other societal changes that have characterized the last few years have brought us around to a different relationship between those to be served and those who do the serving. I am primarily concerned that we recognize the importance of this increasingly large occupational, vocational-technical constituency of the Community Colleges. They will provide a ready-made clientele for External Degree Programs, and it's really very encouraging to see that the four-year institutions are now ready to share with the Community Colleges in that awesome responsibility of bringing low-income and marginal people into the economic system. I think that the previous efforts of the four-year higher institutions in limiting classroom activities to extension and continuation programs – which some of our students consider to be useless pap – were really designed primarily to serve those who were already in the system. Yet, in contrast, as I read some of the preliminary material about the British experience, it is a little startling to note that, in their first year's program the majority of individuals taking advantage of the Open University were professionals and people already in technical positions. We should be aware of that possibility as we do our planning.

In many ways the Community Colleges represent the ideal partners for the four-year institutions if the external degree concept is going to be taken seriously. The Community Colleges should comprise a major component of the partnership to make these programs succeed. They not only can be used as regional centers – ready-made regional centers which have facilities such as libraries and space and staff that can be used part time for counseling, weekend seminars and so forth – but they have accumulated a tremendous amount of experience as part of that vanguard in higher education that has reached out to serve all of the people's children. The programs that need to be developed should take advantage of the experiences the Community Colleges have had in providing supportive services to low-income students, as it is the Community Colleges that have been forced to move beyond the critical problem of access to higher education to the more critical one of the holding power of the institution. We used to brag that Merritt was the model of the open-door institution. But we suddenly discovered that we had two open doors and that it took less than one year to go in the front door and out the back door.

We in the Community Colleges have had experience in training indigenous paraprofessionals, in training people in new careers programs and in Model Cities programs. We have become experts in trying to train the working poor so that they may obtain the additional training to qualify for living wages in this most affluent of societies. We've even begun experimenting with cooperative education programs. Although cooperative education in general has not been greatly furthered by the country's economic condition, we are focusing on the British "sandwich" version in which we go out to industry and find persons who are considered to be good prospects for advancement, then convince their employers to subsidize them so that they may come to our campus for a quarter or two. Indeed we have had a great deal of relevant experience that should be tapped by the four-year institutions as they reach out into new dimensions. Further, the extensive experience acquired by Community Colleges in allowing credit for community-service types of activity is something that the four-year institutions should study.

I add one note of caution: We want to be sure that these new External Degree Programs, whether a part of existing institutions or new models, don't become havens for unmotivated hippies, streetpeople and minorities who might very well be regarded as the natural clients.

In summary, the constituency for External Degree Programs has to emerge to a large extent from what has been the constituency of the Community Colleges. These new programs will give our graduates and our constituents a major new option – it will allow them to go into the world of work with fewer impediments. It will allow them to get married, to stabilize their families and their lives with the knowledge that

they are no longer cut off from the possibility of completing their formal education and obtaining four-year degrees. This is a very, very significant breakthrough from the vantage point of our type of student at Merritt. The External Degree Program is perhaps the essential link in the development of a truly democratized system of higher education in California. □

Dr. Smith has been president of Merritt College, Oakland, since 1968. Previously he was Deputy Director of the Western Region, Office of Economic Opportunity.

" . . . Some educators welcome innovation, but not many. What I'm suggesting is that the innovative needs for an excellent External Degree Program be furnished by those who are not opposed to innovation, those who recognize the need for adapting to change — understanding change and coping with change.

"So please, let's have the people who really want to make it work, and who are willing to make an effort to make it work, and who are not afraid of innovation — let's have those people involved to the utmost in External Degree Programs.

" . . . I strongly encourage that we recognize the need for many, many subjects in the program; I hope it is not limited to one or two subjects or one or two disciplines. As this concept is developed, we will need External Degree Programs in a wide variety of areas . . .

"As a former scientist and engineer who went wrong by going into management, I can tell you that scientists and engineers recognize change. But I can also tell you as a member of management and as a long-time worker for the good of many communities, the key is not science and engineering, important as they are. The key is to get the sociologists and the technologists to understand each other and work together!"

Rear Adm. Charles F. Horne, Jr., USN, Ret.
President, California Coordinating Council
for Higher Education and former Vice President,
General Dynamics Corporation

REACHING OUT THROUGH CONTINUING EDUCATION

by Richard C. Barbera

"They are, I am told, about to extend the school age in England. They will extend it to 70 — I hope."

— Voltaire

The significance of this centuries-old quip has not failed to influence leaders of higher education in California such as Chancellor Glenn S. Dumke, as evidenced by the establishment of programs of lifelong learning in The California State University and Colleges.

More than 125,000 adults enroll today in more than 5,000 Continuing Education classes throughout the 19-campus system. They are served through Extension, Summer Session, Community Services and other formal and informal programs which have existed for years. More recently, with the start of off-campus programs leading to degrees at Chico State College and at California State College, Fullerton, adults (and even some who typify the age group normally represented in regular on-campus programs) are offered new opportunities to achieve certificates and academic degrees at times and in locations which best meet their requirements.

These students bring Voltaire's philosophical observation closer to reality: The modal age of the Continuing Education population in The California State University and Colleges has moved upward. Persons in their 50s and 60s are back in school.

Dr. Barbera is Coordinator of Continuing Education for The California State University and Colleges.

Fresno State College was the pioneer, establishing the system's first Extension Program in 1932. Fresno's venture followed a national trend at that time which emphasized agriculture and education, and the college's clientele primarily were farmers and school teachers in the San Joaquin Valley. Continuing Education at other colleges began operating on similar patterns, creating programs for in-service teachers and in other academic areas suiting the needs of local community residents. The newest campus of The California State University and Colleges — California State College, Bakersfield — was authorized to establish Continuing Education in 1970 by the Board of Trustees. All 19 campuses during 1970-71 experienced proportional enrollment increases in academic areas other than Education.

Standards for academic quality of Continuing Education programs are the same as those for regular offerings in The California State University and Colleges. More than 80 per cent of all credit offerings are identical with regular on-campus credit offerings. There are, however, legislative limitations on the transfer of degree credit obtained through Continuing Education. Further, faculty ordinarily do not acquire professional advancement and recognition applicable for promotion and tenure through their contributions to Continuing Education. However, a significant reexamination of these factors, particularly as they apply to External Degree Programs, is under way.

While instruction of regular students is confined to campuses, Continuing Education in The California State University and Colleges is primarily offered in off-campus communities to meet the time and location requirements of adult students. Geographic Program Service Areas (see map on Page 68) are assigned each of the 19 campuses. Although these Service Areas would seem to indicate total access to higher education, practical limitations — principally travel time and distances — have tended to inhibit the extending of educational opportunities far beyond the

campuses. Thus, present Continuing Education services are in fact offered to only approximately 2.5 per cent of the potential maximum adult student population. Efforts are under way to at least partially overcome this situation. They include wider, more imaginative use of instructional media and independent study, presently under development by consortia of colleges in the Northern and Southern regions of the State.

On a national basis, the average Continuing Education services of all institutions meet needs of about 20 per cent of the potential maximum adult student population. In California, all segments of public and private education reach an estimated 18 per cent through Continuing Education services. There are signs that, within the next few years, California will not only equal the nationwide level but will exceed it significantly. The reasons:

- California's average adult population is the country's youngest.
- California has one of the most – if not *the most* – urbanized populations in the nation.
- California's civilian labor force has grown at an average rate that is twice as fast as the national average – and it is also more skilled than the national labor force.
- Californians are receptive to formal education. This is evidenced by their support and development of the country's largest system of public education.
- There are increasing indications that business and industry recognize that the future viability of California's economy depends on the quality and quantity of Continuing Education.

While all of the foregoing has emphasized the role of Continuing Education in The California State University and Colleges as providing a key element in contributing to the California economy, Community Services – an aspect of Continuing Education – represents a significant value to social-cultural stability. For many years, programs supported under Federal grants have helped alleviate problems of welfare, unemployment, citizenship effectiveness, social unrest, personal and family alienation, and environmental debilitation. One such example is Humboldt State College's "Manila Community Development Program," an ongoing effort by student and faculty volunteers to aid low-income residents in understanding and using government resources to improve economic, educational, employment and environmental conditions.

Last December the systemwide Kellogg West Center for Continuing Education was dedicated on the campus of California State Polytechnic College, Pomona. Made possible by a $3 million grant from the W. K. Kellogg Foundation, Kellogg West provides California's most modern facilities for residence instruction to business and industrial leaders, to local and State government officials, to lower, middle and upper-management executives, to educators, technologists and engineers. Its conference schedules extend into 1974. The type of education made possible by Kellogg West implies a lifetime of continued learning for persons of all ages and avocations.

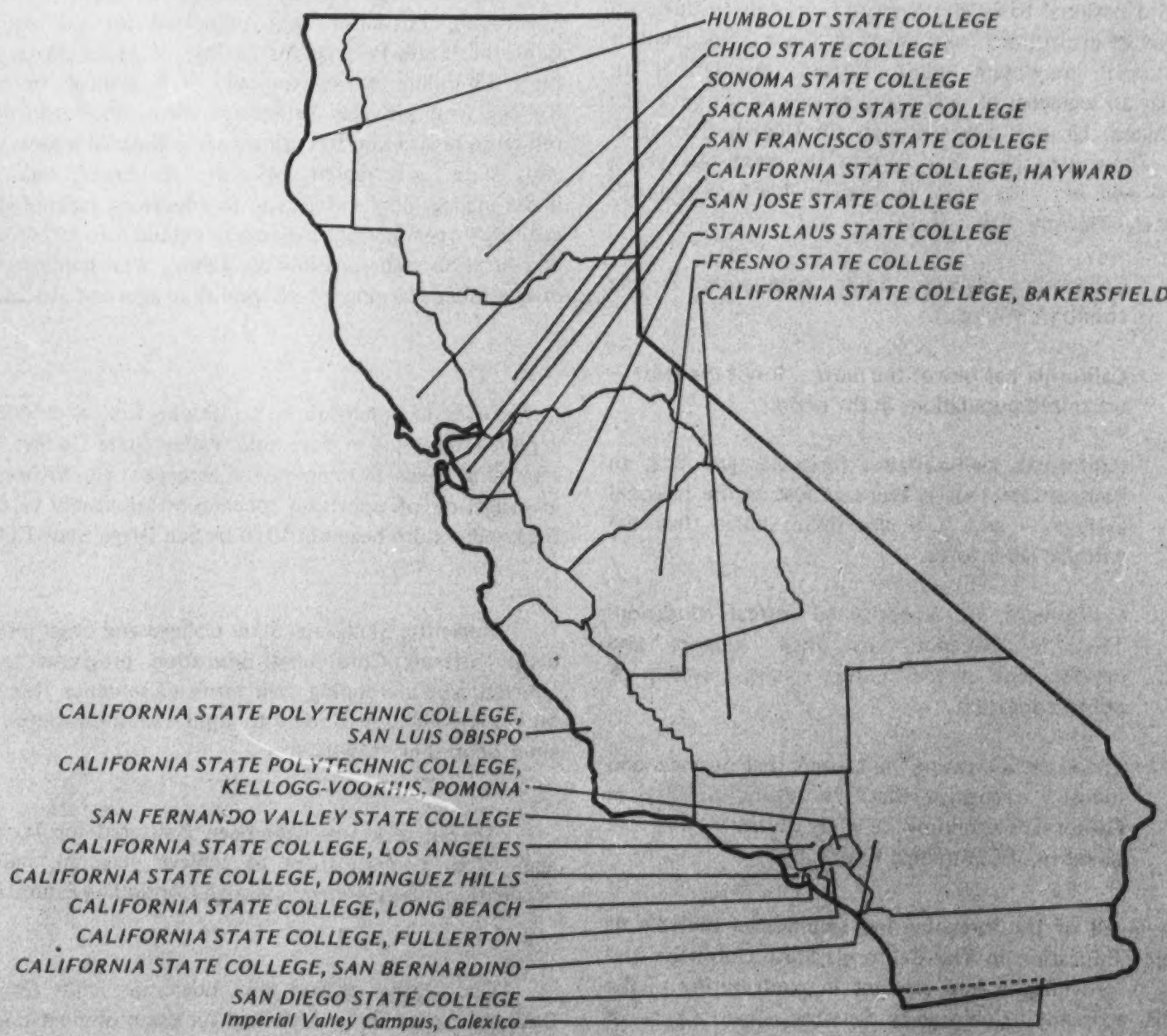
Other examples of the Continuing Education outreach is a pilot study at San Fernando Valley State College into the retraining needs of unemployed aerospace employees, and an investigation of television techniques applicable to External Degree Programs begun in 1970 by San Diego State College.

Recently, Stanislaus State College and other institutions began offering Continuing Education programs to prison convicts who are ending their terms of sentence. The focus is on helping inmates to learn to cope with the society they will enter upon their release.

Special programs have been instituted for women. The goal is to counsel them to achieve personal, family and occupational development through Continuing Education.

Cooperative efforts are under way with Community Colleges. An example, proposed for establishment under Title I of the Higher Education Act of 1965, is a Northern Regional Television Consortium. Involving eight State Colleges in cooperation with local community colleges, the consortium could serve more than four million residents of Northern California.

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES
PROGRAM SERVICE AREAS


HUMBOLDT STATE COLLEGE
CHICO STATE COLLEGE
SONOMA STATE COLLEGE
SACRAMENTO STATE COLLEGE
SAN FRANCISCO STATE COLLEGE
CALIFORNIA STATE COLLEGE, HAYWARD
SAN JOSE STATE COLLEGE
STANISLAUS STATE COLLEGE
FRESNO STATE COLLEGE
CALIFORNIA STATE COLLEGE, BAKERSFIELD
CALIFORNIA STATE POLYTECHNIC COLLEGE, SAN LUIS OBISPO
CALIFORNIA STATE POLYTECHNIC COLLEGE, KELLOGG-VOORHIS, POMONA
SAN FERNANDO VALLEY STATE COLLEGE
CALIFORNIA STATE COLLEGE, LOS ANGELES
CALIFORNIA STATE COLLEGE, DOMINGUEZ HILLS
CALIFORNIA STATE COLLEGE, LONG BEACH
CALIFORNIA STATE COLLEGE, FULLERTON
CALIFORNIA STATE COLLEGE, SAN BERNARDINO
SAN DIEGO STATE COLLEGE
Imperial Valley Campus, Calexico

What's in the future? Certainly there will be significant changes in the patterns of offerings, in processes of instruction, and in the characteristics of Continuing Education students themselves. Major changes that seem likely include:

- Increases in the number and variety of sequences of occupational offerings.
- An increase in counseling services for adults.
- Increased use of technology and independent study, particularly by consortia of campuses in The California State University and Colleges and local Community Colleges.
- A shift in characteristics of the Continuing Education population, from the present "modal" personality of a 28-year-old female school teacher to a "modal" personality of a 35-year-old male engaged, or becoming engaged, in a service occupation.
- Increased involvement in the search for solutions to community problems.
- An increase of service to military personnel.

Approximately one-third of the occupational-professional categories presently identified by the U.S. Department of Labor did not exist 30 years ago. It is the adult who must be given a chance to be released from provincial-mindedness, prejudices, apprehensions, narrow customs and obsolete habits; it is the adult who must be given a chance to contribute to a modern world of science and complex organization with competence and human understanding.

To influence and to respond to such directions are the major challenges confronting the Continuing Education program of The California State University and Colleges. □

TOTAL ADULT POPULATION: 1970 CENSUS, AGES 25-45
TOTAL ENROLLMENTS: 1970 EXTENSION & SUMMER SESSION (EXCLUDING REGULAR STUDENTS)

COLLEGES	SERVICE AREA POPULATION	CONTINUING EDUCATION ENROLLMENT
HUMBOLDT	33,571	1,950
CHICO	67,227	4,800
SONOMA	160,355	4,200
SACRAMENTO	265,565	8,400
SAN FRANCISCO	249,152	10,200
HAYWARD	414,613	5,400
SAN JOSE	385,807	13,200
STANISLAUS	145,362	3,900
FRESNO	147,231	19,500
BAKERSFIELD	97,606	828
SAN LUIS OBISPO	116,671	600
POMONA	251,217	10,000
SAN FERNANDO VALLEY	643,405	9,000
LOS ANGELES	542,250	3,600
DOMINGUEZ HILLS	253,050	435
LONG BEACH	393,831	10,200
FULLERTON	311,298	4,500
SAN BERNARDINO	249,306	975
SAN DIEGO	340,071	11,700

ENGLAND AND THE UNITED STATES: AN EXCURSION IN NON-TRADITIONAL STUDY

Continued from Page 21

Degrees Based on Instructional Programs
(The Degree-Granting Agency
Vouches for
But Does not Conduct)

The Council for National Academic Awards was the example we found in England for this kind of degree. The Council, you will recall, does not teach or examine students, but it vouches for the teaching and examining as conducted by other institutions and awards degrees to students who complete their programs. Are there similar examples in the United States?

The closest I can come is the Commission on Accreditation of Service Experiences of the American Council on Education. It makes recommendations for the awarding of college credit for instruction completed in the military services. It does not award credit, however, much less degrees. I understand that the Union for Experimenting Colleges and Universities has authority to grant degrees to students enrolled in its University Without Walls projects in the event host colleges decline to grant degrees themselves. Many colleges, of course, base the degrees they confer partly on the basis of study completed elsewhere under other auspices.

The sticking point comes, for both the college and the student, when the question arises of letting study outside of the college's jurisdiction fulfill not just a portion of the degree requirements, but all of the requirements. The college naturally feels its degree loses something of value in such a case, but as long as all or most residential colleges insist on a period of residence, particularly as a terminal degree requirement, students who move around, such as servicemen and young wives, are severely blocked no matter how many credits they build up. It is this kind of situation that makes one wonder about possible new arrangements for educational record keeping and degree granting.

* * * * *

What do we make of the impressions formed by this survey of degree programs under way or soon to be under way, and of what we hear of plans or proposals for additional new programs, at institutional, state, regional, national, and even international levels? One can react from different points of view – student (actual or potential), faculty member, college administrator, legislator, parent, taxpayer, concerned member of a changing and confusing society. For groups such as the Carnegie Commission on Higher Education, and the Newman Task Force, and the Commission on Non-Traditional Study, the task of perceiving clearly and wholly the developments in post-secondary education – where they lead, and how they might be guided to maximize their promise and minimize their danger – is awesome indeed.

The backdrop includes the tremendous recent growth of higher education, with a larger percentage of college-age youth enrolling in colleges and universities than in any previous period of history. It includes imbalances between the ideal and reality of equal educational opportunity, between education and occupations, between income and costs, between institutional forms that worked well enough once and ways of life today that make them seem creaky or obsolete.

It includes, too, a remarkable increase in the learning that goes on outside of schools and colleges, in the home, on the job, in libraries, museums, churches, and many other places. It includes increasing numbers of people of all ages who want and need to learn, to prepare for new jobs or just to keep up with jobs they hold, to inform themselves about what is going on, to reach new levels of personal growth.

One also senses about people today that more of them than in previous generations are aware of their individuality, and are seeking in the midst of a mass society to achieve their own unique identities. The evidence for this spreading of individual consciousness is hard to come by, and it is a controversial matter, but I believe it contributes to the push against standardized teaching and standardized testing.

Against this background, how should we conceive of non-traditional study? Members of the Commission on Non-Traditional Study have proposed that one needs to start with what is traditional, and they suggest that traditional post-secondary study has these characteristics:

1. It is confined to a limited age group (roughly 18 to 24), and to a selected portion of this group.

2. It is campus-centered.

The Commission on Non-Traditional Study is jointly sponsored by the College Entrance Examination Board and the Educational Testing Service, and supported financially by the Carnegie Corporation. With headquarters in New York City, the Commission, led by Dr. Samuel B. Gould, is charged with examining all aspects of non-traditional study at the post-secondary level. Dr. Gould has reported on the first six months of the Commission's work in New Dimensions for the Learner – A First Look at the Prospects for Non-Traditional Study.

At the Commission's November 1971 meeting in Washington, D.C., educators engaged in planning or implementing a variety of External Degree Programs described their approaches and programs. As the Commission's Executive Secretary, I am fortunate in being able to draw upon their reports, and also upon a working paper on models of External Degree Programs prepared for the Commission by John R. Valley. This paper will be included in a collection of working papers scheduled for publication by the Commission this spring.

It will not be the Commission's last word on the subject, however. Professor Cyril Houle, a member of the Commission, and Dr. John Summerskill, Director of the Office of External Degree Plans, an office also sponsored jointly by the College Board and ETS, are now preparing a monograph on the external degree, its history, forms and strengths and weaknesses, which the Commission hopes to make available early in the summer. The final report of the Commission itself is due to appear in about a year. In the meantime, I can only share the strands of fact and opinion I have heara so far while attending to the Commission. *–J.A.V.*

3. It is based on a conventional program which includes the usual features of residence, requirements, semesters, courses, classrooms and credits.

What is most non-traditional is what departs the most from these characteristics:

1. People of all ages, who want to and are capable of learning.

2. Learning centered in many different kinds of places and circumstances.

3. Learning freed from constraints of semesters, courses, and credits and requirements of so many years, and so much time in residence.

The traditional pattern is convenient and effective for some people. For many, however, it is inconvenient, ineffective, and sometimes impossible. They are the ones who need opportunities for non-traditional study. Not only are new learning arrangements needed, on a large scale, but arrangements also for counseling people to take advantage of them, and for validating and recognizing the learning they accomplish.

* * * * *

External degree developments are encouraging in two aspects: One, they represent a response to the needs of people for non-traditional study. Two, they represent a response by higher education, in the formal sense of the phrase. To the extent that colleges and universities expand this kind of response, they can provide safeguards of quality that they are probably most qualified and motivated to provide. To the extent they hold back in their response, a parallel system of post-secondary education may very well grow to immense size and strength in this country.

One difficulty shared by all involved in developing or evaluating these projects is the lack of adequate information about rather crucial matters, and also the lack of experience with some of the processes that are incorporated in the plans. The characteristics as well as numbers of people in the populations to be served; the resources available with respect to staff, facilities and learning materials; and techniques for the kinds of assessment and advisement that are called for – these tend to be only partially understood. Universities also exist in regard to financing.

In evaluating programs of non-traditional study, including External Degree Programs, four criteria stand out as particularly relevant. The first is the extent to which the program reaches out to serve people who lack access to the kinds of education they need and seek. The second is flexibility, and an important aspect of flexibility is the opportunity for an individualized program of learning that draws on a wide variety of relevant resources. The third is quality – quality of counseling, quality of instructional materials and experience, and quality of assessment. The fourth is financial soundness.

The External Degree Programs now on the scene or soon appearing will inevitably be test cases of the basic concepts involved. If the programs grow toward these four criteria, higher education in America may take on new life and stature, and what now seems so non-traditional may become in time the accepted and valued way for Americans of all ages to enhance their capacity for life, liberty and the pursuit of happiness. □

THE PRESS MEETS THE ISSUES WITH DR. BOYER

Continued from Page 30

Mr. Sitomer: If I read you correctly one of the concepts is to extend educational opportunities to those either younger or older, who are in some phase of society where traditional or conventional education is not available. However, if you begin by using as the nucleus of your program those who are already in a traditional curriculum, is there not some inherent danger?

Dr. Boyer: Perhaps I have not fully grasped the subtlety of the question, but my answer is that there is greater danger in holding rigidly to a single pattern and ignoring the kind of learning pattern and the style of living which at least some people find much more compatible. I think we're fooling ourselves if we assume that this design is appropriate for the great numbers we're trying to serve. I come back to one of my main points, which is that I do not believe this is the way *all* universities should structure themselves. But, in my opinion, until we start looking more carefully at alternate models and making them part of our program development, we're violating the rights not only of certain students who have different views of learning, but also of many faculty who would much prefer to carry on their collegiate relationship with students in a different fashion.

Mr. Irving: Isn't there another danger that this will lessen the energies and efforts toward bringing kids from the ghettos, the poor and minorities, onto the campus? Instead of scholarships and other fund raising efforts, it might tempt some to believe it easier and cheaper to set up something part time where they live.

Dr. Boyer: No, I don't think so, but this does raise another question. There is some evidence that students classified as "disadvantaged," or those who are really educationally deficient, would be the ones who, at least initially, would gain most from the conventional college structure as it now stands. I could argue quite the reverse – that if we find ways to open up spaces that are now being used by people who shouldn't be warming chairs every day, that is, those who *could* carry on under a different design, we then could deal more adequately with those whose education makes it necessary for them to have more structure and more support than I think we offer now. We often use these spaces for those who need them least, and keep these students around for longer periods than we should. Many of them are so far advanced that they might well be able to pursue their educational objectives with much less structure and restraint.

Mr. Miller: Do you think there is any danger that, at least in the public mind, there will develop here a further stratification of higher education -- sort of a fourth-class education behind the university, the four-year college and the community college?

Dr. Boyer: Yes, there is a risk of image and expectation. I hope you'll forgive me for saying, however, that I don't think it has much to do with quality. It has to do with pattern and expectation. But there is the hazard that any effort such as we've talked about will be given a kind of second-class citizenship arrangement. On the other hand, I see another thing happening: You spoke in terms of the public attitude – I have seen an understanding of this and a kind of inspiration in response to this idea among people who in former days were really scornful of the university and college, considering them to have no relation to their own lives.

Not long ago I was in a local television studio for an interview. As soon as I finished, three of the cameramen came up to me to find out how one gets into Empire State. Wherever the idea is presented, a new constituency of citizens suddenly sees universities and colleges more on its terms, instead of those places where "the kids are." And, I think, this is what must happen in the coming years in order for the university to be substantially rooted in the public mind as an institution of service in the best sense. □

President S. I. Hayakawa of San Francisco State College presided at the session of the Conference on External Degree Programs at which Chancellor Boyer spoke. These are excerpts of Dr. Hayakawa's remarks at the close of the session.

In Flight with Dr. Hayakawa

"... The fact that we are modeling ourselves on 18th and 19th Century institutions has been bugging me for a long time.

"... I am reminded, by a peculiar mental association, of the problems of Pacific Southwest Airlines stewardesses who seem to me to be among the glories of California. I've often gotten into conversations with them. They are all high school graduates and many are junior college graduates. They have stopped their formal education to get out into the world and see more of the world. But, at the same time they are working for PSA and looking beautiful, they also have certain intellectual and cultural hungers that remain unsatisfied. I've often thought how we can organize extension services at San Francisco State College to serve them better.

"Stewardesses work on irregular schedules and can't be in class regularly on Mondays, Wednesdays and Fridays, or on Tuesdays and Thursdays, because they never know what days of the week they'll be called into action. You can't set down a weekly schedule of a three-hour class every Monday, for example, because in the meantime they may have to go to work on a Monday. I've often wondered how to go about handling this.

"How about giving the same lecture on Monday, Wednesday and Friday, and giving them credit regardless of the day they may turn up? ... If you have such a thing as a program of tutorial instruction, a contract leading to a degree with an Extended University, then there is no reason why the stewardess – along with many, many other kinds of people -- cannot come and see an academic mentor once a week, once every two weeks, or even once a month.

"And now my imagination goes way, way beyond PSA – to American, United and TWA. And then, since a single campus becomes a parochial, old-fashioned idea, maybe an education in terms of a single State is also an old-fashioned idea...

"Maybe ultimately we can work out a system in which the State University of New York and our own institutions in California can take on the same people as students and have exchangeable credits back and forth. If you can't check in with the State University of New York, you can at least check in with one of our California campuses and maintain a cooperative relationship.

"Anyway, in one way or another, this opens up horizons in my imagination. And, I'm sure, we don't have to think exclusively in terms of stewardesses."

TAKING THE UNIVERSITY TO THE STUDENT

Continued from Page 39

The key man at the delivery level is the Program Manager. This man is fully responsible to the director for full delivery of academic, counseling, records, materials and other components of the educational product to the user on-site – students and agencies. The manager sees to it that each project runs smoothly, that course scheduling and counseling sessions take place, that books and library loan resources are promptly delivered, and that all clientele needs are satisfied.

In addition to these positions, other major components include a complete, internalized financial management system apart from the university's (although it may be successfully managed by a good computer-based university system) to handle incoming and outgoing invoices and payments which come in a steady flow at all times, since there is no semester system; a complete book and material ordering and assembly operation, which works at a steady pace (some UWW programs already run as many as 350 formal courses per year); a multi-media center, which can be set up to produce learning packages and run for as little as $200,000 per year (packages can be produced, ready for the printer, for about $3,500); a course scheduling and instructor briefing operation working closely with the program managers; and a liaison man who works with professional interest groups and advisors, and with the campus.

An external, university-based faculty committee is most important. It represents the faculty organization (most often the Senate) and has delegated powers to accredit courses, visiting faculty, and curricula, and to evaluate and report back to the institution; a corps of counselors, almost always part-time (they are paid by the day, with expenses), drawn from the university, professional societies, agencies and other sources, who are highly trained, and a registrar-information system "honcho" who tends the office. There may also be a few more part-time aides, generally local people at remote locations who assist in a sort of program manager capacity.

Consortia are critical to UWW operations. Unlike most academic consortia (usually loose confederative relationships), we suggest that schools cooperating in UWW projects sign legally binding agreements to *fully* recognize all offerings and credits, and to cooperate in a dozen ways, including exchange of faculty, counseling, records, materials, etc. It is very tight academic relationship, operating to the benefit of the student. About 45 institutions are now in consortia.

The universities which have participated as major institutions in HUD's program in the past, or which are now participating, include the University of Tulsa, Southern Illinois University (Edwardsville), the University of Oklahoma, the University of Detroit, Shaw College at Detroit, the University of Northern Colorado and Central Michigan University. The largest programs by July 1, 1972, will be operated by Colorado, Oklahoma and Central Michigan.

Oklahoma's program, established in 1964, is the oldest and the most traditional academically. Northern Colorado's program, set up in 1970, is academically more contemporary, and during the first year of operation incorporated a total, university-run program. It has been contracted out by the University to a non-profit subsidiary of a profit-making consulting firm. The Central Michigan program, although a new one, appears to be the most flexible managerially and most wide-ranging and promising from an academic point of view.

We wish these programs and the others in developmental stages well. We salute their contributions to meeting the educational needs of urban American. □

FOUNDATIONS AND THE UNDERWRITING OF BETTER WAYS

Continued from Page 36

providing better ways for these educationally neglected will be prominent on the higher education agenda in the 70's. Either new educational forms will be developed within existing institutions or new institutions will be created. But in a learning society such as ours, these citizens cannot remain unserved much longer. As Franklin Roosevelt once observed, "The test of our progress is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have too little."

The second theme will be a greater creativity in relation to improving the instructional process. The debate regarding long overdue changes in curriculum and in teaching methods of higher education has been stimulated by student concern regarding the instructional process. However, professors and administrators have not really had their feet to the fire until fairly recently when a disenchanted public attitude has been reflected in decreasing legislative and private support for colleges and universities. It is unfortunate that improvements in the teaching-learning process have occasionally had to be stimulated by embittered students and outside pressures, often economic, but often not very logically applied to the educational system needing modification. However, only recently have we had requests at the foundation from many institutions seriously considering and introducing across-the-board changes in the educational process and seeking developmental support.

An individual professor or even an entire department has sometimes become enamored to the possibilities of greater use of multi-media or more independent study. But these considerations have not generally been institution-wide. If academics do not care to have their teaching hours dictated by legislatures, they might well ponder the concluding remarks of the recently published study entitled "Efficiency in Education." It said, "Faculty discussions of educational policy should be more attuned to budgetary considerations than they have been traditionally. The curriculum, the mode of instruction and the teaching load do make a difference in cost. They may not spell the difference between institutional solvency and bankruptcy, but they may differentiate between institutional progress and stagnation."

The foundations have seen in recent months a few more thoughtful approaches to reform in instruction. Faculty anxiety regarding the use of multi-media seems to be lessening, although slowly. Some instructors still worry about their status, obsolescence of their skills and their role in an altered educational system. However, plans to reward and encourage faculty involvement and to train faculty members in the skills that are needed for new instructional approaches do have their effect. Television, as a single example, is no longer seen as only a transmission device to carry a traditional lecture to more students so that each can have a front-row seat. Instructional problems are analyzed first, and then solutions that television has to offer are applied. This is quite a change from just a few years ago when people came in wanting hardware not knowing how they were going to use it, not being able to identify the problem – just that there was such good hardware available.

Magnification, storage, transportation, replication, analysis, synthesis, response to speed of learning, imagery, dramatic effect, mobility are all being considered. TV is being used to take students inside a blast furnace, examine the actions of a panic-stricken crowd, or take a class of medical students to a breach delivery. Animation and time lapse photography can demonstrate with an imagery that no lecturer can approach. The right dramatic effect can drive home a point for a lifetime. TV is tireless and can repeat its message as long as necessary in accordance with the varied learning speed of individual students. We've all heard this message for years, but for the first time the foundations are beginning to see proposals wherein people have actually thought through the problem and how they can utilize these materials.

The third theme during the 70's will be a series of mergers and new cooperative arrangements triggered by economic pressures and the current public catchword being applied to education, "accountability." One of the difficulties with the new concept that has captured the public's fancy with a label such as accountability is that it has an infinite variety of definitions and applications. For the purpose of this discussion, let me suggest that accountability can mean simply an analytical report on how college resources are used for teaching research or public service and a measure of what has been produced. If educational institutions do begin to respond to the public outcry for more analysis of their utilization of resources, a concurrent movement toward more pooling of resources to increase cost effectiveness can be anticipated.

Many plans being discussed in relation to the external degree relate in part to pooling the resources of a number of institutions. To use a rather elementary example, higher education cannot afford much longer the employment of teachers of exotic languages on several campuses in geographic proximity, each teaching only a handful of students. Unique but not fully utilized laboratories and libraries or other special facilities cannot continue to be duplicated and maintained on each campus in a given geographic area.

A shift in the age of students served will also demand new effectiveness in sharing educational resources. John Gardner suggested sometime ago that "We have abandoned the idea that education is something that takes place between six and eighteen (or twenty-two) years of age. It is lifelong." I predict that colleges and universities will gradually accept a more comprehensive role in providing lifelong education.

This in turn will call for new relationships with the informal network of continuing education organizations, business and industry, voluntary agencies, service organizations, community institutions such as libraries, museums, art centers and churches. Granted, continuing education activities of colleges and universities generally include contact with such organizations, but the interrelationships are neither as systematic nor as comprehensive as they should be. Further, there will be more creativity in developing linkages between the formal, that is traditional, undergraduate and graduate collegiate educational enterprise with the many informal teaching programs. Usually these teaching activities exist at colleges and universities side by side with virtually no interaction.

In summary, we will see greater thought given to new inter-institutional arrangements providing better coordination and cooperation. Institutions of higher education will become less unilateral in order to obviate their inefficiencies of multiple duplicative efforts. Better answers must be demonstrated in roles and relationships of the universities, the four-year colleges, the community colleges – both public and private – in meeting educational goals.

What then is the foundation's role? They must continue to provide a launching pad for meaningful innovations. They must underwrite the trials of new and better ways to pursue the nation's educational goals. They must conserve relatively limited resources by supporting those improved approaches to the educational process that have a reasonable chance of becoming institutionalized, becoming a permanent practice of many educational units. Finally, they must continue to set their priorities by identifying the most important problems and then supporting potential solutions to those problems. Foundations constantly endeavor to avoid supporting change unless the objectives are clearly stated, meaningful, and have a fair chance of achievement.

Alfred North Whitehead stated it in his usual succinct fashion: "The art of progress is to preserve order amid change and to preserve change amid order. Life refuses to be embalmed alive." □

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CREATIVE RESTRUCTURING: THE FACULTY ROLE

Continued from Page 55

disadvantage a step further would seem to lead to the conclusion that one should not be forced to pay more for an education by accident of residence.

The concern with quality has several dimensions. Who, for example, are to be the instructors? Are they to be drawn from the regular faculty? If so, are they to teach in the program as an overload? To do so might mean penalizing the students in regular session. An added preparation could well dilute the quality of the lectures given. On the other hand, if regular faculty are not teaching overloads, replacements must be found to cover their campus classes. What, then, of the quality of these replacements? Does this mean that those who pay are to enjoy the services of more experienced, and presumably better qualified, instructors? Again, the tuition issue surfaces. The obvious remaining alternatives are, first, to hire part-time faculty for the External Degree Program, but that raises the same question of the quality of the off-campus program we started with, or second, State funding of more full-time faculty.

Still in the realm of quality control, who is to approve programs, review course content and evaluate performance? If, as has been suggested, each campus is to have its own "Little External Degree Commission," will it be the responsible agent? An off-campus program in police science run under the auspices of such a commission is quite likely to generate a significant degree of opposition from the Criminology Department. More, the separation of external courses from campus evaluation runs the grave risk that degrees granted will be deemed inferior. A crucial issue is involved here. Degrees given under the program must be fully equivalent to those obtained by full-time students in residence. Anything short of this standard would perpetuate a hoax on the dedicated student enrolled in the non-residence program.

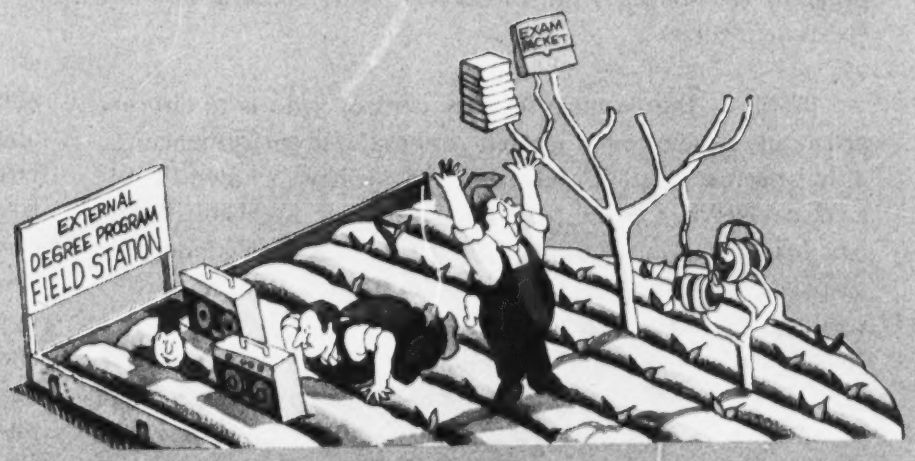
No mention has been made of such matters as staffing formulas and budget allocations within the program. These and many other problems must be addressed. Full consultation with the faculty is essential in their solution. Obviously, this is true of all aspects of the program. The Commission has consulted extensively with the Academic Senate and, though the flow of paper has reached flood proportions, it has had the salutary effect of minimizing unwarranted concerns. The Executive Committee of the Senate has been fully briefed on several occasions and liaison assured through the presence of Senate nominees on the Commission.

Recently the Senate approved three resolutions in support of changes in State regulations pertaining to such matters as residence credit and fee schedules for pilot programs developed under the aegis of the Commission. They were approved with little discussion, not because they were lacking in potential controversy, but because prior consultation had resolved points of possible conflict. Those who advocate other innovations in higher education would do well to emulate the approach to faculty taken by the Commission on External Degree Programs.

Higher education must be receptive to change. The educational needs of society and of the individual in society alter. Innovation is not only "in," it is essential. In that light, criticism of faculty conservatism might appear to follow logically. Conservatism must not be equated with obstructionism, however. Change only to save money or simply to "shake up the establishment" is quite properly opposed by most faculty. Hasty and ill-considered change, change without planning or data to support it, will and should be resisted. Cooperation in the development of experimental pilot projects, together with improved communications among those conducting the experiments, will avoid duplication of effort and permit pooling of information.

We then will be better able to determine which innovative programs are worth expanding and which are academic dead ends. Faculty have a crucial role to play in this evaluative and planning process. They must play it if the Academy is to meet successfully the challenge to change now before it. □

POMONA – THE WORKING CONFERENCE



CONFEREES' DELIBERATIONS: AN OVERVIEW

by George E. McCabe

More than 200 participants – most of them faculty and administrators of The California State Colleges (since renamed as The California State University and Colleges) – attended the statewide Conference on External Degree Programs December 16-18, 1971, at Kellogg West Center for Continuing Education on the campus of California State Polytechnic College, Pomona.

The conference, whose theme was "The 1,000-Mile Campus – Priority of the 70's," was called by Chancellor Glenn S. Dumke on the recommendation of the Commission on External Degree Programs. It was conceived as a focal point for ideas which representatives of the 19 campuses might consider in local-level explorations of the external degree concept.

Following is a summarization of reports from 14 workshops conducted as a part of the conference the evening of December 17 and the morning of December 18. The recommendations and statements of opinion, in all cases, reflect views of workshop participants as reported by group discussion leaders, and are not necessarily those of the author of this summary.

The Conference

There was general satisfaction with the conference, combined with the complaint that participants were required to work too hard. Despite what was regarded to be a high caliber of addresses and final discussion, participants believed more time should have been devoted to small group discussions.

There should be periodic repetition of conferences of this type. It was stated that perhaps a future conference should concentrate on innovation without specific reference to external programs.

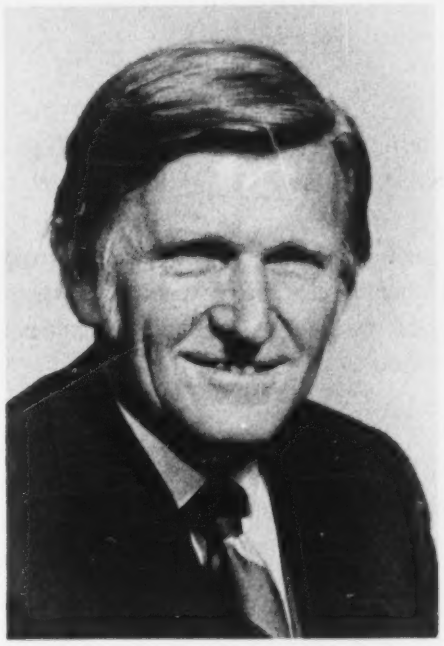
Need, Demand, Resources, and Priorities

Before external programs leading to degrees are established, a need should be determined and a demand identified.

In view of limited financial resources, we must define clearly what we want to do and consider dropping some of our present commitments. Is there a danger that State budgeted funds will be siphoned from regular residence session funds; that a new ordering of financial priorities will be established for higher education? Are external programs really a top priority?

Faculty reluctance to participate in innovative programs, including external programs, should not be misinterpreted as opposition to the concepts and the ideas. Instead, it reflects a concern about the establishment of programs without adequate financing.

Will new campus programs be delayed as the result of the emphasis on external programs? Some faculty are eager to develop External Degree Programs since they have been unable to gain approval through normal channels for new on-campus programs. Are new ideas going to be moved from State-funded internal programs to student-funded external programs?



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Some groups stated that financial support by the State is essential if the quality of external programs is to be comparable to regular programs. Others saw this as a long-term goal. They identified an immediate need for *partial* State support to permit key faculty and administrators to be released from regular duties to design and develop programs.

Campuses should be allowed to use a portion of their State support budget for research, development, and experimental purposes – not only for external programs, but for the entire spectrum of college activities.

Some State-supported evening programs already provide an opportunity for the part-time student to earn a degree through work taken solely in evening classes. External Degree Programs should not be established which would be duplicatory or competitive.

Primary staffing of external programs should be by members of the regular faculty. Faculty members should teach in external programs as part of their regular teaching load, rather than as an "overload." Attention should be given to these questions: What process will be used to determine the loads of faculty who teach part-time in external programs and part-time in regular programs? How will monetary compensation be determined?

The California State University and Colleges personnel system should reward participation in external programs in matters of promotion, retention and tenure.

Student Costs

Should not degree programs for external students receive the same level of financial support as programs for matriculated students? External students are tax paying citizens with the same needs for collegiate education. Why discriminate?

Will minority and financially disadvantaged students be left out again? Self-support programs are beyond the financial resources of many minority students. If it is conceded that State-support of external programs is not an available option, particular emphasis should be placed on devising programs which will serve minorities and the economically disadvantaged; which will emphasize a "new careers" concept; which will serve individuals who have had two years of college and who are "locked into" para-professional public service positions because of the inaccessibility to them of further opportunities for higher education. OEO, Model Cities, LEEP, and agency funds probably will be available to defray the tuition costs which these individuals could not, themselves, bear. As a longer range goal, State-support should be sought for adults who are incapable of paying the fees required for external programs.

Student Services

Under the current fee structure, will funding be provided to support activities such as counseling and advising? Should external programs provide the usual services afforded to regular students in the areas of counseling, health, library? Will external students need more counseling but less service in the areas of health and special activities?

There is a need for faculty development programs which will emphasize the psycho-therapeutic roles of faculty as they work with students in non-traditional teaching-learning modes.

Administrative Structure

"Should not external degrees, *per se*, be offered by an office of The California State University and Colleges?"

The answer, within groups and between groups, is mixed, but generally negative. The response of the group which posed the question was, "Yes, to facilitate cooperation between programs and faculty teaching in them."

But others said:

"We support the Commission's stance that the local campus should be the operational unit to propose and offer external programs."

"We are not in favor of a Statewide system similar to the Empire State arrangement in New York because of the possibility of creating a second-class degree."'

"The Commission should look into the potential of a systemwide degree, not patterned on New York, but more on the 'University Without Walls' concept."

There were also differences of opinion with regard to the manner in which the individual colleges should organize to offer external programs. Two groups suggested that each college should set up a "School of External Degrees," made up

of combinations of the other schools. Others disagreed directly or tangentially, through such statements as:

"External programs should be tied to the home discipline department so that professors do not face a divided loyalty between an external unit and a department or school."

"External Degree Programs, in all senses, should be part of the *regular* degree program apparatus and processes of a college."

"Programs should be developed by faculties of the local campuses which meet the standards of local faculty."

Related to the issue of Statewide or systemwide programs was the question, "Will the entire State be 'open game' for External Degree Programs, or will we use the same regional structure we now use in extension?" Also related was the suggestion that there is a need for further coordination in developing and using media technology. And, finally, there was a statement that there is a need for a strong leader, at a fairly high level, for all of Continuing Education in The California State University and Colleges system.

Admissions

There were these observations: It is important to establish matriculation standards for external programs leading to degrees which will clearly distinguish them from non-degree extension offerings; the quality of programs will be dependent upon establishing suitable standards for admission; and admission should be on a life-time basis to accommodate the "in-out" student.

Residence Credit, Transferability of Credit, and Credit Banks

Views regarding "residence credit" ranged from extending the flexibility being proposed for external programs to all of extension, on the one hand, to a suggestion made by two groups that, "We might well be served by abolishing the concept of residence credit in the California Administrative Code, and simply talk about credit."

The groups which dealt with the issue of transferability of credit recommended adopting a principle of complete transferability of courses among The California State University and Colleges for majors, minors, and general education, and for the transferability of credit from external programs to regular programs.

Dr. Grenville Gibb, Coordinator of Chico State College's External Degree Program, discusses program with students in Redding, California. Chico plan enrolls more than 140 at Marysville, Redding and Susanville.

One group went to the trouble of adopting a resolution:

> *Resolved, that the group endorses, in principle, the establishment of a Statewide "Credit Bank" system, and a degree offered by The California State University and Colleges, with appropriate evaluation and safeguards for quality, so that a student may accumulate credit to qualify for a degree through an external program.*

Dealing with the same issue, another group stated:

We should consider the possibility of establishing a single agency to develop procedures for assessing competency and achievement and to award credit. We were divided as to whether this should be a statewide body, or whether the function should be retained as a campus responsibility.

One group expressed fear that assessment of achievement for academic credit could lead to a new "lock step;" that a single test or single set of standards could be used to promote conformity. Nonetheless, this group agreed that the idea should be given more study.

Cooperation Between Systems of Higher Education

Cooperation should be attempted among The California State University and Colleges, the University of California and the Community Colleges. An attempt should be made to involve all three segments in a consortium to permit joint uses of resources for the extension of non-resident education. One group reported substantial feeling that cooperative approaches "should be viewed as leading ultimately to a *unified* approach."

Evaluation of Students and of Program

The evaluation of pilot projects was described as "central and critical."

In the evaluation of students, a greater focus must be placed on, "What do we expect students to achieve?" We should consider granting degrees on the basis of satisfaction of performance requirements rather than on the basis of hours of class attendance.

Instruction in External Programs

External Degree Programs offer a potential for developing new modes of instruction and new, substantive approaches to higher education. The mere exportation of existent resident degree programs is not sufficient basis for establishing external programs leading to degrees as this would simply perpetuate existing inadequacies. Priority should be placed on developing exportable innovative instructional modes with emphasis on new delivery systems and teaching strategies.

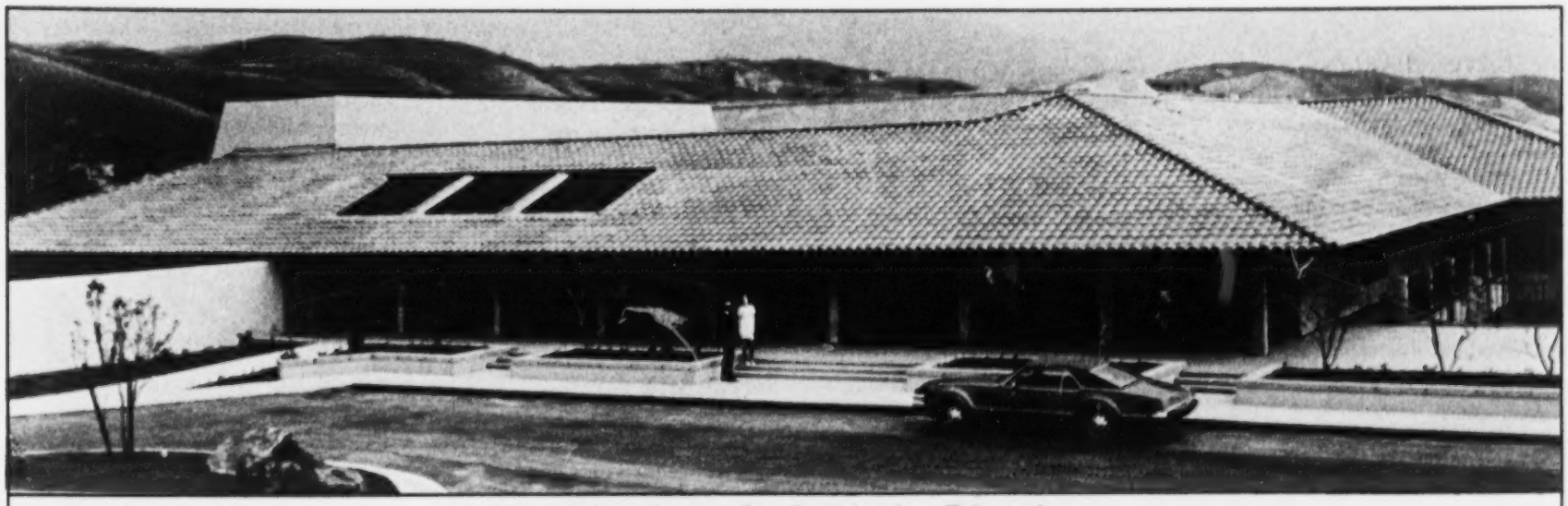
The Commission on External Degree Programs should address itself to the possibility that we will move significantly away from the concept of the classroom-laboratory as the center of instructional activity. Nonetheless, innovative programs should be based on multiple patterns of teaching-learning which should include student-faculty and student-student interaction. The assignment of all students in external programs to mentors will be an ingredient necessary to the success of such programs.

A need exists for greater flexibility in use of individual study formats. Such individualization of instruction will necessitate "relief from rigid semester or quarter limitations."

Basic questions which have been asked of regular programs, and not answered, are raised again regarding external programs. Illustrative is this comment: "On first examination, it would appear that External Degree Programs will be strictly in the cognative domain, rather than the affective. What is a degree, anyway? What does it mean?"

One group recommended initially limiting "degree" offerings to professionally related programs. Another group expressed fear that external programs will create a shift to a vocational emphasis on campuses, and will skew proper campus balance between liberal arts and career oriented programs.

One group recommended that international activities become part of the overall external operations of individual colleges. □



Kellogg West Center for Continuing Education
Pomona, California

CONFERENCE ON EXTERNAL DEGREE PROGRAMS, DECEMBER 16-18, 1971†

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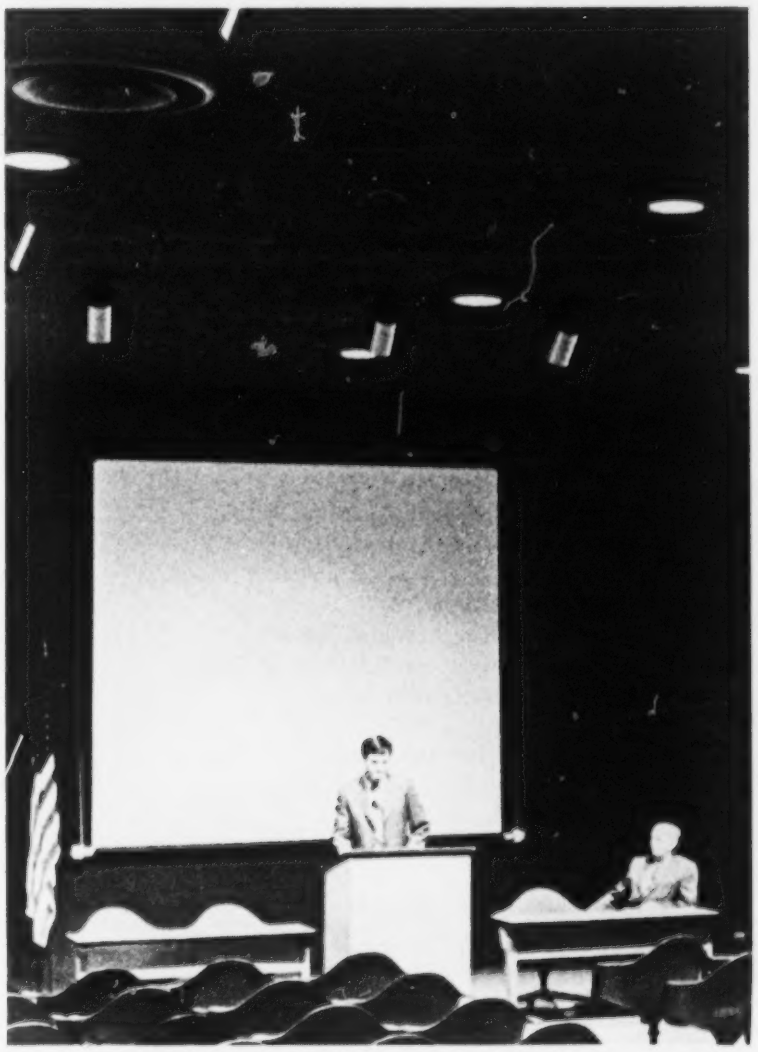

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†The Conference on External Degree Programs occurred prior to the effective date of legislative action renaming The California State Colleges as The California State University and Colleges. Titles of individuals are listed as they were in effect on the Conference dates.

*Indicates platform speakers and group discussion leaders.

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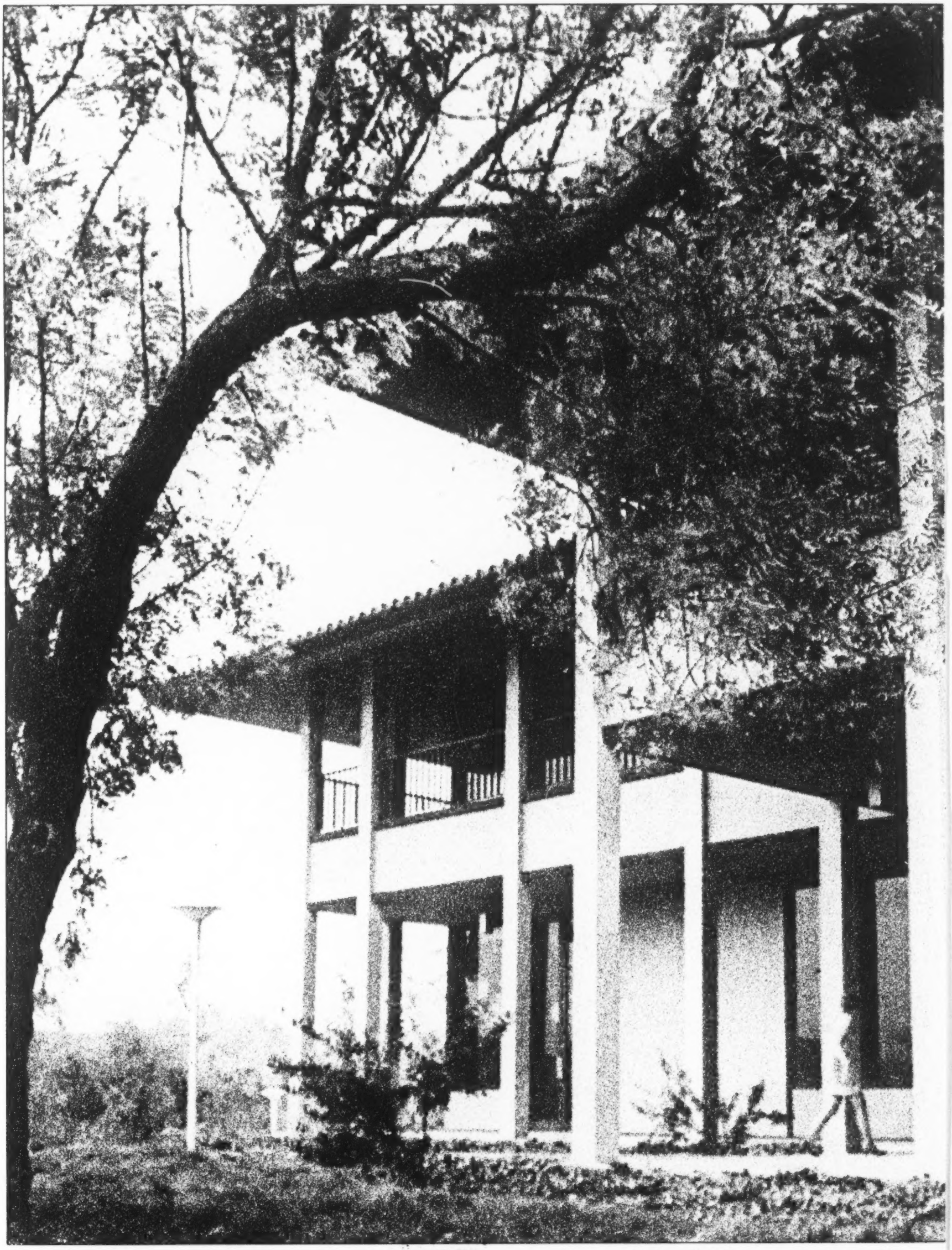

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